

FUTURE MARITIME ARMS CONTROL
CONSIDERATIONS IN THE NORTH
ATLANTIC TREATY ORGANIZATION
AREA OF INTEREST

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Future Maritime Arms Control Considerations in the
North Atlantic Treaty Organization Area of Interest

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ABSTRACT

The rapidly diminishing numbers of defense dollars and the even more rapid shrinkage in their purchasing power are forcing extensive re-examination of defense appropriations in the United States and other North Atlantic Alliance countries. Politicians within the governments of all the member nations are discussing the possibilities of reducing budgetary outlays for armed forces personnel and weapons systems. Until recently, most of these conversations centered around land-based forces, especially those forces stationed in other countries. With the exception of the Strategic Arms Limitation Talks, few defense limitation proposals have addressed directly maritime forces. The time is coming, nevertheless, when this will change, perhaps in the very near future.

It is necessary, therefore, to examine carefully all of the options available to a government in considering future maritime arms control measures. This must be done now for two reasons. First, the United States and her allies might as well try, through the negotiation process with the Warsaw Pact members, to obtain some sort of mutual restraints in reciprocation for what the former intend to do sooner or later, anyway. In the second place, the NATO members should, while they have the time and are not yet squeezed by extreme monetary or political pressures, thoroughly examine every aspect and facet of this problem to insure a full understanding of the situation and the possible results of any courses

of action taken. Then when it becomes necessary to negotiate with potential adversaries, the allies will be ready to bargain effectively to achieve optimum results.

This essay reviews recent maritime arms control agreements, accords, and attempts in light of their applicability to present circumstances. Other arms endeavors which might have an indirect application are also discussed. The present maritime forces of the NATO and Warsaw Treaty Organization members are assessed, as are their relative strengths and weaknesses. Next, the various ways of considering a maritime arms agreement are examined, as are the problems associated with each method of constructing an agreement. Finally, the relative merits of each proposal are considered and conclusions are drawn about the factors needed in calculating an effective and manageable maritime arms control formula.

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PREFACE

This paper has been written with the helpful guidance of Professor Robert L. Pfaltzgraff, Jr. and Professor W. Scott Thompson, both of The Fletcher School of Law and Diplomacy. To them I have a debt of gratitude for their assistance and criticism. Their thoughtful comments were most beneficial.

Much of the background for this paper came from interviews with officials of the United States Departments of State and Defense, the Department of the Navy, the North Atlantic Treaty Organization, and the United Kingdom Ministry of Defense. My sincere thanks go to them for their candid and helpful conversations. Without their forthcoming observations, I would not have been able to write much of this paper.

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The opinions expressed in this paper are solely those of the author and do not reflect the opinions or positions of the Department of the Navy or the Department of Defense. This paper has been conceived, researched, and written for the Fletcher School of Law and Diplomacy and is not reflective of United States government positions on the subject of maritime arms control.

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INTRODUCTION

A recent article in The Washington Post¹ indicated that the 1976 United States defense budget is some \$8 billion over the 1975 request, and weighs in at \$92.8 billion. The article underscores the difficult battle expected in Congress over the large defense requests. The Secretary of Defense, in his report to the Congress argues that for the past few years, the Soviet Union has outspent the United States by large amounts (in real terms) and that

this trend could soon tilt the balance of world power against the United States and its allies.²

This is not the first statement on the growing sentiment in the Congress to limit and preferably to reduce the defense expenditures of this country. Nor will it be the last. That these expenses are a smaller part of the gross national product than any time before in recent history seems unimportant. (Present and proposed defense spending are 5.9 percent of the GNP. 1968 Vietnam-era defense spending peaked at 9.5 percent of the GNP.³) Total dollar amounts of the defense budget are rising and this figure draws most of the Congressional attention. Regardless of its value in "real dollars" or "constant dollars," this total defense expenditure proposal seems in for heavy

¹Michael Getler, "Soviet Arms Restraint Urged," The Washington Post, February 12, 1975, pp. A1, A10.

²Getler, "Soviet Arms Restraint Urged," p. A10.

³"More for Defense," Newsweek, Vol. 85, No. 6, February 10, 1975, p. 17.

trimming in this Congress.

Unless there is some presently unforeseen international calamity involving United States military forces, there seem to be few possibilities for the Congress (and the general population) not to demand reduced expenditures and smaller portions of the GNP for the Department of Defense. Much has been and is being written on this subject by experts both in and out of the federal government. It is not the intention here to expand upon these arguments. Rather, it is the opinion of this writer that the economic squeeze presently gripping the United States and her allies will not soon be loosened. And until it is loosened or, until a military situation demanding the use of American forces occurs, this country and her allies will be increasingly unwilling to accept defense spending perceived as excessive. Whether or not 5.9 percent of the GNP is an excessive amount in fact is relatively unimportant. The total dollar amount is perceived as too much and, therefore, must be reduced in one manner or another.

This paper is based on the assumption that costs for personnel, weapons systems and platforms, and operational commitments for the maritime forces of the United States and her allies are not going to fall in the near future. In fact, inflationary costs for naval and merchant ship building and maintenance are rising at a startling rate.⁴ The platform

⁴For example, in the FY 1976 budget, the U.S. Navy is asking for a \$2.39 billion increase in shipbuilding costs alone--up from \$3.06 billion in FY 1975 to its present cost of \$5.45 billion (a 43% increase). See Alan Jarvis, "Navy Aims for Fewer, Better Ships," Navy Times, February 19, 1975, p. 56.

costs do not, in many cases, include the expenses of the hardware put onto the hulls once they are built. This applies to naval and civilian ships. The former have complex communication and weapons systems, while the latter have complicated automated systems for sailing, off- and on-loading, and manning the ships. But suffice to say, costs of ships, especially naval ships, are increasing rapidly.

It follows, then, that the navies of America and her allies must shortly reach a point beyond which they can no longer stretch themselves thinner and thinner to meet the multiple commitments of their governments and their alliances. At this juncture governments (and the United States government in particular) have three choices. They can reduce their international naval commitments. They can increase their navies to meet the commitments. They can attempt to alleviate or lessen the threats which generated these individual and alliance commitments in the first place. The reduction of commitments by the United States seems an unlikely prospect, although that might be the most sensible solution to the problem. (This, in effect, has been the British solution.) Be that as it may, this government, through its Executive and Legislative branches, seems unwilling to re-examine its international commitments carefully and thoughtfully with an eye to realigning them with present military and naval capabilities. The second choice, increasing maritime forces to meet present commitments, seems highly unlikely for the reasons already mentioned. This brings up the third choice in trying to narrow the gap between capabilities and commitments. The

third solution is the basis for this paper. Reducing the perceived threat and thus lessening the need for large naval forces seems a highly likely and perhaps desirable course for the government to take, especially in the present atmosphere of detente. Mutual arms controls, restraints, and reductions attempts are the paths to these lessened threat perceptions.

It seems then, that future maritime arms control considerations should be examined as a possible area of fruitful negotiations between the United States and her allies, and among the allies and their potential adversaries. These avenues of possible negotiation will be viewed in the light of recent history, the present forces, and the various methods of constructing maritime arms agreements. The perceptions of the situation are obviously predominantly those of an American, but the allied and adversary positions are also included for balance and proper perspective of the total picture. The conclusions are by no means definitive, nor are they meant to be so. Rather, they are proposals designed to generate some discussion and thought regarding maritime arms control because little attention has been devoted to this subject since World War II. What little has been written on the subject has been based, in most instances, on faulty information, incomplete grasp of the complexities of naval forces and their effective utilization, or over-simplified views of the world situation, especially the geographic area of interest to the North Atlantic Alliance and the Warsaw Treaty Organization. It would seem that a discussion of this situation, before it becomes a dominant issue,

would be both prudent and necessary. Prudent because time is needed to examine the problem carefully and thoroughly before being confronted with the need to make firm decisions. Necessary because this complex issue should not be treated in haste or with superficiality.

These then are the reasons for this paper. Maritime arms control considerations are coming, perhaps within a decade or so. They are based on economic considerations and the thought that negotiating mutual constraints are more beneficial than proceeding with unilateral reductions which have no corresponding restraints on the opponents' forces. Allied maritime forces exist in large measure because of these perceived threats. Therefore, the lessening of these adversary forces should make more acceptable the reductions of allied capabilities. The possible ways of examining future maritime arms control considerations are the subject of this paper.

Chapter I reviews selected arms control agreements prior to World War II, with emphasis on the methods used to determine the formulae for reductions and navies to be involved. It touches on the reasons for the agreements, as well as the lack of accords in some instances. The second chapter follows this same line, concentrating on post-World War II maritime arms efforts. This period was much less productive in agreements and the reasons for this are outlined and examined in some detail. Certain themes can be traced in these two chapters as they relate to the obstacles to agreements, reasons for accords, and the difficulties surrounding these negotiations. Chapter III reviews selected post-war arms control attempts that

indirectly affect the maritime environment. These are discussed because they continue the themes detected in the first two chapters, and because they provide some thoughts on future maritime arms control considerations. Chapter four diverges from the first three in that it is contemporary rather than historical and discusses the present maritime situation in the North Atlantic Alliance area of interest. This chapter is divided into two parts, with the first part assessing the forces (their strengths and weaknesses) of the two opposing alliances. The second part is a very brief outline of the current Soviet naval thinking as stated by Admiral Gorshkov in a series of articles originally published in Morskoi Sbornik. This second part is short, but it does provide some insight into Soviet perceptions of the uses of the seas and ocean force employment. Although not directly related to maritime arms considerations, this second part impacts upon the possible methods of arms control to be followed and the arenas in which negotiations might be productive. After laying the groundwork with the historical background, the assessments of the current circumstances, and the present thinking on maritime affairs, the last three chapters discuss the ways of considering future maritime arms control agreements, the advantages and liabilities of these methods, and the final comments on the emerging situation.

CHAPTER I

SELECTED ARMS CONTROL AGREEMENTS PRIOR TO WORLD WAR II AFFECTING MARITIME FORCES

They shall beat their swords into plowshares,
and their spears into pruning-hooks; nation
shall not lift sword against nation, neither
shall they learn war any more. Isaiah (2:4)

The notion contained in this verse has moved men of good will to examine means and methods of achieving the goal of "plowshares" for centuries. One of the first "new world"¹ proposals was An Essay towards the Present and Future Peace of Europe by William Penn, written in 1693.² Penn proposed a "general parliament" or "imperial dyet" of the sovereign princes of Europe, meeting every two or three years to "formulate rules of justice" which would govern their relations with one another.³ According to this proposal, "disarmament would follow, and the funds generally spent on military preparedness would be spent to better advantage." This would benefit all by: less spilling of blood, an enhanced reputation for Christendom in the eyes of the infidels, a great saving of money, greater freedom of travel and commerce, a unification of Christians against the Turkish menace, and a greater

¹ Actually a British subject, but residing on the western side of the Atlantic in the future country of America, William Penn was the leader of the Quaker colony of Pennsylvania.

² Sylvester J. Hemleben, Plans for World Peace Through Six Centuries, The University of Chicago Press, Chicago, 1943, p. 47.

³ Hemleben, Plans for World Peace..., p. 49.

friendship among the princes of Europe allowing them to "take wives of their own choice."⁴ Penn's approach emphasized a diplomatic negotiation among the leaders of the European states, accepting their inequality of size, strength, and wealth. Other writers following Penn had more ambitious propositions which tended to alter or modify the political map of Europe with their outlines. For example, John Bellers, a Quaker friend of Penn, proposed a division of Europe into a league of 100 equal provinces each with "1000 soldiers or an equivalent in ships or money for enforcement of rules and defense of the league."⁵ Bellers was followed by Charles de Saint-Pierre, who wrote several tracts between 1712 and 1738 on perpetual peace in Europe through a European assembly. This assembly would construct a treaty bringing the signatories together in a "permanent and perpetual union." "War was to be renounced as an instrument of national policy, for a sovereign was to take up arms only against a country which the union had declared an enemy to European society."⁶ Saint-Pierre also wished to alter the political fabric of Europe through his union which would be governed by the rule of force and compulsory membership. Arms control was important to Saint-Pierre because he asked that all

⁴Hemleben, Plans for World Peace...., pp. 51-52. Penn thought this last benefit "should be very moving to the Princes."

⁵Christos Zirps, "The Limitation of Naval General Purpose Forces in Historical Perspective," unpublished thesis of the Naval War College, Newport, R.I., 1973, p. 5.

⁶Hemleben, Plans for World Peace...., pp. 56-64.

states, large or small, have the same numbers of troops in their armies, and that these numbers be reviewed by the union semi-annually.⁷

In the latter half of the Eighteenth Century Jean Jacques Rousseau added to Saint-Pierre's works with his Project for Perpetual Peace, in which he advocated a federation of Europe "with a court or parliament to arbitrate all disputes between the member-states"⁸ and a federal army for enforcement if necessary. Jeremy Bentham wrote also at this time about perpetual peace, although his views on this subject were not published until later. He advocated the establishment of a world court and emphasized "disarmament as a requisite for international peace."⁹ At about the same time, Immanuel Kant published his proposals for a perpetual peace which included the abolition of standing armies and constitutional governments for all states in Europe.¹⁰ This latter proposal embodied his assumption that the people would be less likely to give their consent to war than would their leaders, the princes.

The Nineteenth Century saw such expressions of the desire for peace as the formation of the American Peace Society in

⁷Hemleben, Plans for World Peace...., p. 69.

⁸Hemleben, Plans for World Peace...., pp. 74-79.

⁹Hemleben, Plans for World Peace...., p. 83. See also, Hans Wehberg, The Limitation of Armaments, The Carnegie Endowment for International Peace, Washington, 1921, translated by Edwin H. Zeydel, p. 6.

¹⁰Hemleben, Plans for World Peace...., p. 94.

1828 by William Ladd.¹¹ In his An Essay on a Congress of Nations..., he advocated the creation of

A Congress of Nations for the establishment of a code of international laws and other purposes promoting the peace and happiness of mankind; and, 2d, a Court of Nations entirely distinct from the Congress, though organized by it, for the purpose of arbitrating or adjudicating all disputes referred to it by the mutual consent of two or more contending nations.¹²

Ladd's proposal was followed shortly by William Jay, writing a book called War and Peace (1842). He advocated "alliances" (treaties) for peace with tribunals to hear complaints and adjudicate causes.¹³ "Public opinion, moreover, would unite with self-interest in preserving these treaties inviolate," thus making war "unjust and dishonorable." Additionally the

millions now expended in our military establishments could be applied to objects directly ministering to human convenience and happiness. Our whole militia system, with its long train of vices and its vexatious interruptions of labor would be swept away.¹⁴

¹¹James Brown Scott, "Introduction," to William Ladd, An Essay on a Congress of Nations for the Adjustment of International Disputes without Resort to Arms, Carnegie Endowment for International Peace, Oxford University Press, New York, 1916, p. vii. Other peace societies had been formed previously, but Ladd's was a larger and national effort. His Essay was originally published in 1840.

¹²Ladd, An Essay on a Congress of Nations..., p. 106. See also, Georg Schwarzenberger, William Ladd: An Examination of an American Proposal for an International Equity Tribunal, Constable and Company, Limited, London, 1935, especially pp. 18-22.

¹³William Jay, War and Peace: The Evils of the First and a Plan for Preserving the Last, The Carnegie Endowment for International Peace, Oxford University Press, New York, 1919, especially pp. 54-55.

¹⁴Jay, War and Peace..., p. 63 and p. 64.

James Lorimer, of the University of Edinburgh, wrote The Institutes of the Law of Nations,¹⁵ in which he proposed an international government, separate from national governments, to act as "the guardian of the freedom" of the national entities.¹⁶ His plan included the reduction of armaments, a difficult but not impossible task even although nations could rearm in times of emergency.¹⁷

Practical applications of these ideas were attempted in the negotiations between John Jay and Lord Grenville in 1794, and were actually reached in the Rush-Bagot Agreement of 1818. When Jay went to Great Britain to negotiate with Grenville, he had originally been instructed by Alexander Hamilton and others to explore the possibility of and to attempt to obtain an evacuation of the British posts along the Canadian-United States border "even to the extent of limiting the size of American garrisons in those forts and a mutual limitation of armaments on the Great Lakes."¹⁸ Lord Grenville rejected that particular proposal and in no part of the final treaty was the concept included.¹⁹

¹⁵James Lorimer, The Institutes of the Law of Nations, A Treatise of the Jural Relations of Separate Political Communities, William Blackwood and Sons, Edinburgh 1883, 1884 (2 volumes).

¹⁶Hemleben, Plans for World Peace...., pp. 118-119.

¹⁷Zerps, "The Limitation of Naval General Purpose Forces....," p. 6.

¹⁸Samuel Flagg Bemis, Jay's Treaty: A Study in Commerce and Diplomacy, The Macmillan Company, New York, 1923, p. 122.

¹⁹Bemis, Jay's Treaty.... See pp. 321-345 for a complete text of the Treaty.

The War of 1812 involved several spectacular battles on the Great Lakes, and demonstrated "the importance of naval control of the inland waterways, especially of the St. Lawrence River and the Great Lakes...."²⁰ Sporadic negotiations between the British and the Americans took place during the ensuing years, being punctuated by periodic hostile acts by the British even while the United States was dismantling her ships. In an attempt to stop the contemplated British build-up of forces on the Great Lakes in 1815, the President, through the Secretary of State, authorized the United States Minister to London to

propose to the British Government such an arrangement respecting naval force to be kept on the lakes by both Governments as will demonstrate their pacific policy and secure their peace. [The President/ is willing to confine it on each side to a certain moderate number of armed vessels, and the smaller the number the more agreeable to him; or to abstain altogether from an armed force beyond that used for revenue.²¹

After two more years of negotiations, the Rush-Bagot Agreement became effective, limiting the naval forces to four vessels on each side "not exceeding one hundred tons burden, and armed with one eighteen-pound cannon. ...All other armed vessels on those lakes shall be forthwith dismantled and no other vessel of war shall be there built or armed."²² Although

²⁰Merze Tate, The United States and Armaments, Harvard University Press, Cambridge, Massachusetts, 1948, p. 28.

²¹John B. Moore, A Digest of International Law, (Eight Volumes), U.S. Government Printing Office, Washington, D.C., 1906, Vol. 1, p. 691.

²²Tate, The United States and Armaments, p. 31.

the Agreement was threatened during the Civil War and reinterpreted during World War II to permit the building of naval ships on the Great Lakes, it still stands today as a successful example of arms control mutually acceptable and agreeable to both parties.

Although unsuccessful in its arms control attempts, mention must be made of the First Hague Peace Conference of 1899. The Russian Circular Note Proposing the Program of the First Conference included: a "non-augmentation" and eventual reduction of land and sea forces budgets; limits of new firearms to these forces; the prohibition of the use of submarines or torpedo-boats and rams; and the neutralization of certain rescue vessels.²³ The United States government, in its instructions to the American delegates,²⁴ commented on the non-augmentation of land and sea budgets that

(i)n comparison with the effective forces, both military and naval, of other nations, those of the United States are at present so far below the normal quota that the question of limitation could not be profitably discussed.²⁵

The State Department instructions continued by categorizing other restrictive proposals as "lacking in practicability," but did encourage support for those rendered helpless in battle,

²³James B. Scott, editor, Instructions to the American Delegates to the Hague Peace Conferences and their Official Reports, The Carnegie Endowment for International Peace, Oxford University Press, New York, 1916, pp. 3-4.

²⁴Andrew D. White, Seth Low, Stanford Newel, Captain Alfred T. Mahan, USN, Captain William Crozier, USA.

²⁵Scott, Instructions to the American Delegates..., p. 7.

and the efforts of the conferees toward an extension of good offices, mediation, and arbitration.²⁶ No positive maritime arms control efforts resulted from this conference, perhaps because the leading powers were placing greater emphasis on their naval forces and did not desire any restraints.

The Second Hague Peace Conference of 1907 adopted several conventions pertaining to the maritime aspects of war including: the status of enemy merchant ships at the initiation of hostilities, the laying of automatic submarine contact mines, bombardment by naval forces during war, restrictions to the right of capture in ocean war, creation of an international prize court, and rights and duties of maritime neutrals.²⁷ The United States, however, did not approve of all of these conventions, signing only those pertaining to submarine contact mines, naval bombardment, maritime warfare and the Geneva Convention, capture in naval war, the prize court, and neutral rights. All of those conventions which the United States signed may be considered maritime arms restraints in that they limited, defined,

²⁶Scott, Instructions to the American Delegates..., pp. 7-8. For the complete text of Captain Mahan's reports concerning the maritime questions raised at the First Conference, see pp. 35-45. The Permanent Court of Arbitration was the most significant result of the First Conference.

²⁷Hemleben, Plans for World Peace..., p. 132.

or prohibited various actions in time of war.²⁸

The instructions to the American delegates specifically authorized them to submit a question concerning "the reduction or limitation of armaments," but only if "affirmative evidence" indicated that the European states wished to discuss this matter.²⁹ The report of the American delegation included this statement regarding restraints on arms.

The Second Conference was equally unprepared to limit armaments, to place a restriction upon military or naval forces, or to bind the nations not to increase the budgets pertaining thereto.³⁰

Although the subject was eventually discussed, no commitments were made except to urge that "Governments take up again the serious study of that subject."

A subsequent effort was made at the International Naval Conference in London in 1909 to delimit maritime war by completing the work of the Second Hague Conference. The declaration covered blockades, contraband, convoys, and compensa-

²⁸For complete texts of the various conventions and declarations and their signatories, see James B. Scott, editor, The Hague Conventions and Declarations of 1899 and 1907, The Carnegie Endowment for International Peace, Oxford University Press, New York, 1915, especially pp. 141-219 for conventions affecting maritime efforts. Interestingly the Russias signed the maritime conventions on merchant shipping at the beginning of hostilities, conversion of merchantmen to warships, naval bombardment, the maritime applications of the Geneva Convention, and neutral rights and powers in wartime.

²⁹Scott, Instructions to the American Delegates..., pp. 69-85, especially pp. 70, 75, and 76.

³⁰Scott, Instructions to the American Delegates, p. 131.

tion,³¹ and was the final attempt along these lines prior to the First World War.

Post-World War I Disarmament Efforts

The end of the War brought renewed considerations of the maritime war problems, but in a somewhat different light. In the speech outlining his Fourteen Points, President Wilson called for

Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants.³²

The other allies, particularly Great Britain, objected to this point and it was dropped at their insistence.³³ While not perhaps a direct arms restraint measure, Wilson's proposal was definitely a provision for the control of war because it disallowed any special rules for the conduct of war (belligerent or neutral rights, for example) and permitted limits to be set only by an "international covenant," and was consistent with his philosophy of obtaining and maintaining world peace. That

³¹Conventions and Declarations between the Powers Concerning War, Arbitration and Neutrality, Martinus Nijhoff, The Hague, 1915, (no author or editor), (no page numbers). See "XX Declaration of London concerning the law of naval war, February 26, 1909."

³²Address of President Wilson to the Congress of the United States, January 8, 1918, as quoted in Ruhl J. Bartlett, editor, The Record of American Diplomacy, Fourth Edition, Alfred A. Knopf, New York, 1964, p. 460.

³³Zirps, "The Limitation of Naval General Purpose Forces...", p. 23.

philosophy was at least acknowledged in the League Covenant, although in very general terms and without any strong Organization machinery to give substance to the thought.³⁴

The internal politics of the United States after the War revolved essentially around two opposing notions concerning naval strength and use. President Wilson argued that if the Senate did not provide its advice and consent to the League of Nations, then the United States would have to turn to building "incomparably the biggest navy in the world."³⁵ In trying to encourage Senate accession to the Versailles Treaty, President Wilson withdrew a naval building program from Congress, but to no avail politically for the Treaty was not accepted. This rejection of the Treaty and the League, coupled with renewed American suspicions of Great Britain, led to calls in the United States for a renewed naval building program to put the country on at least an equal footing with Great Britain and, preferably, superior to "the next two" nations combined.³⁶ Meanwhile, renewed attempts to control the armaments problems

³⁴Articles 8 and 9 talked of the "reduction of national armaments to the lowest point consistent with national safety" and created a Commission to advise on the attainment of this objective. See Bartlett, The Record of American Diplomacy, for the full text of the Covenant of the League of Nations, pp. 461-470, esp. p. 462.

³⁵Harold and Margaret Sprout, Toward a New Order of Sea Power, Second Edition, Princeton University Press, Princeton, 1946, p. 74.

³⁶Sprout, Toward a New Order..., pp. 75-83. "The next two" potential rivals (enemies) were Great Britain owing to traditional feelings and her control of many of the world's major oil sources, and Japan because of her expansion in the Pacific and her potential threat to U.S. interests there.

were made in the United States, Japan, and Great Britain, many of these feelings being generated by public concern about the dangers of "militarism" and excessive budget demands.³⁷ The result of these sentiments, along with other influences, led Senator Borah in December 1920 to propose a mutual agreement among the three naval powers on future naval policy, specifically a 50 percent reduction in naval building for five years. After much discussion in and out of government over the next 18 months, President Harding, having finally made his decision, announced on July 11, 1921 a conference on the "limitation of armament--among the Principal Allied and Associated Powers, that is, Great Britain, France, Italy, and Japan" and the United States to be held in Washington.³⁸

The Washington Naval Treaty of 1922

Secretary of State Hughes in his opening statement to the Conference on November 12, 1921, called for a "naval holiday" for a period "not less than ten years," including the abandonment of capital ship building programs, the scrapping of certain older ships, and a ratio between capital ships and auxiliary ships for each Power.³⁹ Secretary Hughes identified by

³⁷John C. Vinson, The Parchment Peace--The United States Senate and the Washington Conference, The University of Georgia Press, Athens, Georgia, 1955, Chapter 5, especially pp. 46-49.

³⁸Department of State, Papers Relating to the Foreign Relations of the United States 1921, Two Volumes, U.S. Government Printing Office, Washington, D.C., 1936, Vol. 1, p. 24.

³⁹Sprout, Toward a New Order.... See Chapter Nine for an excellent description of the opening session and Hughes' proposals, especially pp. 149-157. See Appendix I for a List of the Major Navies and the reductions proposed by Secretary Hughes.

type, and in some cases by name, the ships to be scrapped (already built, being built, or being designed), and the ships to be retained by each country. Although his proposal was initially by numbers of ships, his overall formula for devising the limits related to their total tonnage rather than their numbers. For example, Secretary Hughes proposed that the United States scrap 845,740 tons of ships, Great Britain scrap 583,375 tons, and Japan reduce her Navy by 448,928 tons.⁴⁰ He further specified the total tonnage of the remaining ships (capital, other surface ships, and submarines), as well as replacement tonnage limits.⁴¹

Secretary Hughes' proposals achieved initial popular approval, but the representatives of the other four governments involved expressed various doubts about the plan in their replies a few days later. The numbers of submarines, the exact capital ship ratios, the geographic considerations, the auxiliary ratio problems, and other reservations were mentioned by each member.⁴² After much discussion, compromise and in some cases agreement not to agree, the Washington Naval Treaty was signed on 6 February 1922. The final accord consisted of

⁴⁰U.S. Congress, Senate, Conference on the Limitation of Armament, Document No. 126, 67th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., 1922, pp. 47-49.

⁴¹Capital ships were battleships and battle cruisers, also called dreadnaughts; while other non-capital ships were cruisers, light cruisers, flotilla leaders, and destroyers; auxiliaries were a separate category, as were submarines. See U.S. Congress, Senate, Conference on the Limitation of Armament, pp. 49 and 802-805 for the exact tonnages and descriptions proposed by Secretary Hughes.

⁴²See Sprout, Toward a New Order...., for an extended description, pp. 162-170.

capital ships limits of 525,000 tons for the United States and Great Britain, 175,000 tons for Italy and France, and 315,000 tons for Japan. No new capital ships to be built could exceed 35,000 tons or have more than 16 inch guns.⁴³ Aircraft carriers were limited in total tonnage for each signatory, as well as numbers of new construction and maximum gun armament (Articles 7-10). The numbers limits did not apply to non-capital or non-aircraft carrier ships, but these others were limited by maximum tonnage in that they could not exceed 10,000 tons nor carry guns in excess of 8 inches in calibre (Article 11). Interestingly, the Treaty also limited what a signatory could construct for another power whether or not the latter was a party to the treaty (Article 15). The United States retained 18 capital ships, Great Britain 22, and the other three 10 each. The details as to time and method of scrapping ships were outlined, as were replacement procedures. There were no limits on smaller combatants or submarines by numbers or types, although because of "possible technical and scientific developments," another conference was specified in eight years to consider "what changes, if any, in the Treaty /might/ be necessary to meet such developments."

A second treaty relating to submarines was also signed by the participants, but it was very general and bland by

⁴³See "Treaties," in U.S. Congress, Senate, Conference on the Limitation of Armament, for the exact language and details, pp. 871-885.

comparison.⁴⁴ It established procedures for protecting neutrals and noncombatants at sea and forbade the use of submarines as "commerce destroyers" (Article 4). Other treaties not directly related to maritime arms controls were signed at this Conference as were various resolutions and declarations.

The Washington Naval Treaty or Treaties, then, put some limits or restraints on certain aspects of naval warfare by stipulating how many of certain types of ships could be had by each contracting party. Built into the treaties were assumptions of political strength and military force to support the national needs of each country--thus a general capital ship ratio of 5:5:3:1.75:1.75 (United States, Great Britain, Japan, France, and Italy). The numbers were explicit within the categories of ship type and maximum armament was listed. Because of the political perceptions of some of the participants, the same limitations were not agreed upon for non-capital vessels. No real strictures were placed on the numbers or types of smaller surface combatants or submarines,⁴⁵ although acknowledgement was made of possible scientific and/or technical advancements and their possible implications for the future viability of the Treaty. No direct attempts were made toward any sort of geographic controls or restraints except that naval

⁴⁴See "A Treaty Between the Same Powers, in Relation to the Use of Submarines and Noxious Gasses in Warfare," in U.S. Congress, Senate, Conference on the Limitation of Armament, pp. 886-889.

⁴⁵"Cruisers, destroyers, submarines, and aircraft, according to accepted doctrine, were 'auxiliaries' to be used primarily, though not exclusively, to protect and assist the capital ships in carrying out their appointed mission." See Sprout, Toward a New Order..., p. 287.

bases in the Pacific Ocean area would not have increased fortifications or repair and maintenance facilities. This lack of increase was designed to show a continued peaceful intent in the area by all concerned.

There were several attempts following the Washington Conference to strengthen and/or broaden the limitations on naval ships and warfare--none of them very successful. A brief attempt by the League of Nations was made in Rome in 1924 to extend the capital ship restraints to other non-signatory powers. The meeting lasted 11 days and accomplished nothing.⁴⁶

Two year later, President Coolidge tried to convene a second naval conference to supplement but not overlap still another meeting being planned by the League of Nations. The former never came to pass because France and Italy were not interested, and at the latter meeting the participants tried to encompass the "whole problem of disarmament" not just naval weapons.⁴⁷ The naval element of this conference examined compromises among several different proposals by Japan, Great Britain, and the United States, but to no avail because "the fundamental cause of the failure of the conference undoubtedly lay in the differing strategic requirements of Britain and America in cruiser types and tonnage."⁴⁸ Both of these

⁴⁶Hugh Latimer, Naval Disarmament--A Brief Record from the Washington Conference to Date, Chatham House Monographs, No. 3, The Royal Institute of International Affairs, Chatham House, London, 1930, pp. 11-14.

⁴⁷Latimer, Naval Disarmament..., pp. 18-21.

⁴⁸Stephen Roskill, Naval Policy Between the Wars, Collins, London, 1968, p. 514.

countries wanted greater strength in the Pacific (against a potentially hostile Japan), but neither was willing to compromise in any naval ship category to attain its ultimate goals.

Shortly after Herbert Hoover became President in 1929, his delegate to the sixth session of the League of Nations Preparatory Commission for the Disarmament Conference announced the interest of the United States in "a method of estimating naval values which takes account of other factors than displacement tonnage alone."⁴⁹ The formula for estimating equivalent tonnage, for example, could include age, unit displacement, and calibre of guns, thus providing a greater freedom of movement in creating a formula or structure acceptable to all participants. Various proposals, both official and unofficial, were discussed by the governments and the press over the next several months and in September the British invited the original Washington Treaty signatories to another meeting in London in January 1930. In the interim between the announcement and the commencement of the London Conference, the various governments indicated their particular interests and preferences for the conference. For example, both Italy and France saw naval limits or reductions as being an integral part of overall disarmament efforts including military and aerial weapons; while Japan applauded limits

⁴⁹Latimer, Naval Disarmament..., p. 54.

but preferred actual reductions as a positive goal.⁵⁰

The London Naval Treaty of 1930

The London Naval Conference met in January 1930 and decided to divide into working committees to examine particular issues. The United States objectives, as outlined to the American delegates were:

1. To cooperate with the delegations in terminating naval competition by limiting all classes of warships;
2. To assure equality of naval strength for the United States with Great Britain;
3. To arrange a satisfactory relation between our navy and that of the Japanese;
4. To bring about reductions in tonnage wherever practicable.⁵¹

Only some of these goals were met in the more than three months of negotiations among the five participants.

⁵⁰Latimer, Naval Disarmament..., p. 68. See also Raymond G. O'Connor, Perilous Equilibrium--The United States and the London Naval Conference of 1930, University of Kansas Press, Lawrence, Kansas, 1962, p. 51. And as follows: "Britain and the United States were separated by 30,000 tons of cruisers, but the relative value of 8-inch-gun and 6-inch-gun cruisers was a question that neither statesmen nor experts had been able to settle. Japan was determined that the capital-ship ratio of the Washington Conference should not be applied to auxiliary vessels, and the United States was equally determined that it should. Italy insisted on parity was France, which the latter refused to consider. The French clamored for security before disarmament and demanded that any final settlement be made within the framework of the League of Nations. It was obvious to participants and spectators alike that success would depend on concessions, either mutual or unilateral. But there was little evidence of the spirit of compromise among the statesmen, the naval experts, the press, or the public," p. 61.

⁵¹Department of State, London Naval Conference--Speeches and Press Statements by Members of the American Delegation January 20-April 29, 1930, Conference Series No. 3, U.S. Government Printing Office, Washington, D.C., 1930, p. 48.

All of the participants finally agreed not "to exercise their rights to lay down the keels of capital ship replacement tonnage during the years 1931-1936...",⁵² Great Britain, the United States, and Japan even agreed to scrap several more battleships (5, 3, and 1 respectively); aircraft carriers were redefined as ships "designed for the specific and exclusive purpose of carrying,...launch/ing/ and land/ing/ /aircraft/" (Article 3), and were limited as to calibre of guns and minimum tonnage (Articles 4 and 5); submarines were limited by maximum tonnage and gun calibre, but not by number (Articles 6 and 7); generally surface combatants less than 600 tons or 600-2000 tons with specified armament, were exempt from limitations, as were troop transports and other auxiliaries (Article 8); notification had to be made concerning the building of new ships limited by the treaty including the vital statistics of each as the keel was laid (Article 10). Rules for replacement and disposal were extensively outlined in Annexes I and II, while Annex III listed the special ships of each country (by name) exempted from the Treaty.

Much to the disappointment of many national leaders, Part III of the Treaty was not signed by France or Italy who could not solve their political differences between themselves or

⁵²Foreign Office /Great Britain/, Documents of the London Naval Conference 1930, His Majesty's Stationery Office, London, 1930, pp. 2-35 for a complete text of the treaty from which this section is taken.

with others.⁵³ This final part limited by various categories those naval vessels of Great Britain, the United States, and Japan which were not covered by the Washington Treaty or by the London Treaty, or more simply, cruisers, destroyers, and submarines. The cruisers were defined by tonnage (exceeding 1,850 tons), and/or classed by gun calibre (more or less than 6.1-inches); while destroyers were less than 1,850 tons and with guns less than 5.1 inch calibre (Articles 14 and 15). Overall tonnages for cruisers (two categories), destroyers, and submarines (already described in Article 7) were stated for each signatory.⁵⁴ Large cruisers were further limited by number (United States 18, Great Britain 15, Japan 12) and large destroyers (more than 1,500 tons) could not exceed six percent of each signatory's total number of destroyers (Article 16). Building and substitution programs were specific in nature as were procedures for notification of these actions (Articles 17-21). Article 21 allowed any of the three countries to increase its requirements after notifying the others, if it felt its "national security" were threatened by a non-signatory to the Treaty. Finally, merchantmen and the rules for sinking them were discussed and another conference was set for 1935

⁵³Department of State, London Naval Conference--Speeches and Press Statements...., "The Italians insisted on parity with the navy of the strongest continental power, even though there is little likelihood that Italy would actually build up to French tonnage during the period of the treaty. The French refused this demand. France is carrying forward a naval construction program materially increasing her tonnage in cruisers, submarine boats, and destroyers. She was not disposed to reduce these tonnages without new quarantees of security," p. 48.

⁵⁴See Appendix I for the tonnages by category.

(Articles 22-23).

The Conference was considered a qualified success by its president, Ramsay MacDonald, in his letter to the Secretary-General of the League of Nations.⁵⁵ Three of the participants agreed on limits (and in some cases reductions) of cruisers, destroyers and submarines, as well as a "national security" escalator clause to be used not against the other two signatories, while all five agreed on definitions of submarine displacement limitations, calibre of guns for classes of ships, minimum tonnage of aircraft carriers exempted vessels, and rules for scrapping and replacement.

In the London Naval Treaty of 1930 further elements of limitation and/or reduction were introduced, extending the intent of the Washington Treaty. Tonnage by class of ship was still the primary denominator, but sub-categories (cruisers) were introduced, not only by tonnage but also by size of weapon (gun calibre). A minimum was set for aircraft carriers, but nothing was said about the airplanes on a carrier. Gun calibre was outlined, but nothing was said about torpedoes in either surface combatants or submarines. And finally, small craft were given only passing mention and then only as to their gun calibre. No limits or even conversations were mentioned concerning any numbers of personnel, geographic areas, or the integration of naval forces with the other warfare elements--

⁵⁵"Letter from the President of the London Naval Conference to the Secretary-General of the League of Nations," Foreign Office, Documents of the London Naval Conference 1930, pp. 37-38.

military and aerial.⁵⁶ Small combatants, submarines, and light cruisers were not limited by numbers, and the final tonnage limits of cruisers, destroyers, and submarines were not to be implemented until the end of 1936 by the three signatories. In order to meet the 1936 limits, each of the three would have to scrap ships in some categories, but also could build up tonnages in other categories.⁵⁷ The political will to agree was evidenced by the creation of the Treaty in the first place, but it was obvious by what the Treaty did not include and by the fact that only three parties signed Part III, that the Treaty was the result of these politics and not mathematics.⁵⁸ In other words, the ability to make any such agreements depended on the political assessment of the situation and the effects of any agreement on the future situation, not on the innate correctness of any particular numbers or mathematical formula.

While the five major powers involved in the 1922 and 1930 treaties were examining their problems of the major oceans of the world, several other maritime agreements were concluded in attempts to control and stabilize, if not reduce, naval

⁵⁶O'Connor, Perilous Equilibrium..., on p. 118 says, "One must recall the atmosphere and attitude of the times /in the United States/ in order to understand how such a decisive military factor /as air power/ could have been overlooked. The failure to comprehend the role of air power, the faith in unenforceable agreements, the lack of co-ordination between the civil and military branches of government, the fervent dedication to peace, and the political desire for a treaty, combined to create an unstable and illusory equilibrium of armaments."

⁵⁷See Appendix I for the changes for each country from 1929 to 1936 needed to meet the London Naval Treaty limits.

⁵⁸Tate, The United States and Armaments, p. 184. Also: O'Connor, Perilous Equilibrium..., pp. 124-128.

armaments.

Maritime Limitation Efforts in the Mediterranean and Black Seas in the 1930's

In the early 1930's the eastern end of the Mediterranean Sea loomed as a field for naval arms races between Greece and Turkey and Turkey and the Soviet Union until two bilateral agreements halted the competition. While "neither naval accord sought to promote 'disarmament' in a direct quantitative or qualitative sense,...each accepted the current status quo of naval forces in Near Eastern waters and required six months notice of additional acquisition, transfer, or construction of warships."⁵⁹ The Treaty that Greece and Turkey signed in October 1930 at Ankara resembled in no way the Washington or London treaties. This one was a "Treaty of Friendship, Neutrality, Conciliation and Arbitration..." in which naval warfare matters were mentioned in a Protocol.⁶⁰ In that Protocol

⁵⁹Richard D. Burns and Donald Urquidi, California State College at Los Angeles Foundation, Disarmament in Perspective: An Analysis of Selected Arms Control and Disarmament Agreements Between the World Wars, 1919-1939 Volume III: Limitation of Sea Power, prepared for the U.S. Arms Control and Disarmament Agency, Contract No. ACDA/RS-55 III, July 1968, mimeographed copy, p. 165.

⁶⁰"Treaty of Friendship, Neutrality, Conciliation, and Arbitration Between Greece and Turkey. Signed at Ankara, October 30, 1930," League of Nations Treaty Series, Volume 125, 1931-1932, Nos. 1-4, League of Nations Secretariat, Lausanne, 1933, pp. 11-21. Protocol is on p. 21. Another treaty signed at the same time generally established most favored nation status for each and allowed general freedom of movement for ships of each country in the other's ports and harbors for trade and transport. "Convention of Establishment, Commerce and Navigation Between Greece and Turkey. Signed at Ankara, on October 30, 1930," same Volume 125, pp. 373-413, especially Articles 25-31.

both agreed that they sought no "unnecessary increase in their expenditure on naval armaments" and would give six months notice to the other of any new or newly acquired naval armaments. The language was vague and this Protocol was tacked on to the end of the friendship treaty, but it served the purpose of stopping the nascent naval arms buildup between the two countries, both of which had other more pressing domestic and political problems to face and settle.

The accommodation between Greece and Turkey provided a diplomatic pattern for lessening the fears existing between Turkey and the Soviet Union, especially over a naval arms buildup in the Black Sea. Briefly, the Turks worried about the Soviet transfer of a battleship and a cruiser from the Baltic to the Black Sea fleet, while the Soviet Union was deeply concerned about increasing British influence over Turkey (and therefore the Bosphorus and the Dardenelles). Also the British were encouraging Rumania to construct a shipyard, further aggravating the naval armaments problem in the Black Sea.⁶¹ The Protocol to the Soviet-Turkish Treaty itself was brief and involved no qualitative restraints or quantitative reductions, it was rather more of a naval "holiday."

Neither of the High Contracting Parties shall proceed to lay down any naval fighting unit whatsoever for the purpose of strengthening its fleet in the Black Sea or in neighboring seas, or to place orders for any such unit in foreign shipyards, or to take any other measure the effect of which would be to increase the present strength of its war fleet in the above-mentioned

⁶¹ Burns and Urquidi, Disarmament in Perspective.... Volume III: Limitation of Sea Power, pp. 170-174.

seas, without having notified the second Contracting Party previously.⁶²

Although the "neighboring seas" were not defined and left room for possible misinterpretation, the Protocol to this second treaty served its purpose and brought to an end any desires to build up a Black Seas fleet by either party. Each seemed satisfied and neither apparently felt any need to use more specific language or make more detailed arrangements. These two agreements were ones of limitation--not reduction. They involved no scrapping of ships, no reduction of firepower, only control of what already existed by three countries who were politically motivated to achieve workable agreements.⁶³

Elsewhere in the Mediterranean attempts at agreements were not so successful as the running dispute over naval parity between Italy and France again came to the forefront. France viewed her national security (and therefore the maintenance of peace) in terms of her military strength, thus rejecting the elsewhere popular theme of "peace through disarmament." Or, put differently, "equality of armaments meant inequality of

⁶²"Completing the Provisions of Article 2 of the Protocol of December 17th, 1929, Concerning the Prolongation of the Treaty of Friendship and Neutrality between Turkey and the Union of Soviet Socialist Republics. Signed at Ankara, March 7th 1931," League of Nations Treaty Series, Volume 157, 1935, Nos. 3601-3618, League of Nations Secretariat, Lausanne, 1936, p. 365.

⁶³The protocols "had been facilitated by several factors: the sincere desire for peace, the hope of balancing budgets, the recognition of changing tactics of warfare, and the relative simplicity of the agreements." Burns and Urquidi, Disarmament in Perspective...Volume III: Limitation of Sea Power, p. 174.

security"⁶⁴ specifically regarding Germany, but also in relation to French interests in the Mediterranean. Italy, on the other hand, was "out for change, not for the enforcement of the status quo" and could not be attracted by "mere guarantees of the established order."⁶⁵ The net result was that France refused to accept Italy's demand for naval parity, stating she had to worry about maritime defense of the Atlantic as well as the Mediterranean (to say nothing of her other overseas commitments). Italy kept demanding parity, perhaps for reasons of "prestige" more than anything else,⁶⁶ and there seemed no solution to the problem.

The United States, in turn, became concerned over a naval arms race in the western Mediterranean because this might cause the British to execute the "escalator" clause in the London Naval Treaty just concluded.⁶⁷ This, in turn, would disrupt the limits and reductions so painfully arranged among the

⁶⁴Arnold Wolfers, Britain and France between Two Wars--Conflicting Strategies of Peace Since Versailles, Harcourt, Brace and Company, New York, 1940, p. 73.

⁶⁵Wolfers, Britain and France...., p. 143.

⁶⁶Charles P. Howland, director of research, Survey of American Foreign Relations 1931, Council on Foreign Relations, Yale University Press, New Haven, 1931, p. 337.

⁶⁷A memorandum to the Secretary of State from the Chargé in France, after an interview with the French Premier, states, "Should the 1924 [French naval building/ program be put into rapid execution, it is apparent that the British Government, when a certain point is reached, would invoke article 21 of the London Treaty, thus upsetting the existing three power agreement; any event which upsets the agreement would certainly give rise to misgivings among the peoples of these three countries." Department of State, Papers Relating to the Foreign Relations of the United States 1930, Volume I, U.S. Government Printing Office, Washington, D.C., 1945, p. 157.

United States, Great Britain, and Japan in London.⁶⁸ The United States efforts to alleviate the dispute between Italy and France were sincere and untiring but generally ineffective.⁶⁹ The British, on the other hand were more successful than the Americans at concluding an agreement among the three powers-- Great Britain, France, and Italy.

On March 1, 1931, the British Foreign Office announced the reaching of an accord in Rome "on the questions of naval limitations and naval disarmament pending since the Naval Treaty of London."⁷⁰ The agreement raised the capitalship tonnage of France and Italy to 181,000 tons (from 175,000 in the Washington Treaty). These two also agreed to: lay down no more heavy cruisers (more than 6.0 gun calibre) after the completion of their 1930 building programs; restrictions on light cruiser and destroyer construction (determined by tonnage and the age of their existing ships); limit submarine tonnage by 1936. There was a partial "holiday" on destroyer building among the three countries, but the "arrangement established/ no permanent ratio in any category of ship as between the members of the British

⁶⁸ It must also be remembered that the depression was a not unimportant factor to be considered in thinking of renewed naval building programs, and certainly influenced U.S. and British efforts to alleviate the French-Italian differences of opinion.

⁶⁹ Department of State, Papers Relating to the Foreign Relations of the United States 1930, see pp. 132-186, "Negotiations Looking Toward a Solution of the Problem of French and Italian Naval Construction."

⁷⁰ Department of State, Papers Relating to the Foreign Relations of the United States 1931, Volume I, U.S. Government Printing Office, Washington, D.C., 1946, p. 371.

Commonwealth of Nations, France and Italy."⁷¹

The Agreement did not stand for long because the French and the Italians could not agree on what cruisers and destroyers would be in the "over-age" category by 1936, thereby determining the replacement building program. By the end of March, the agreement was dead, although for a while, both the Americans and the British tried to revitalize it.⁷²

The League and World Disarmament

The unsettled naval problems of the French and Italians were carried over into the World Disarmament Conference at Geneva in February 1932. The "naval material" portion of the Draft Treaty was in large measure put together by the five signatories to the Washington and London Treaties who possessed about 80 percent of the world's naval tonnage.⁷³ It sought such controls as: the maximum number of sea personnel ("effectives"), their length of conscripted service and naval reserves; global tonnage limitations by ship-type for each signatory (including capital ships, aircraft carriers, cruisers, destroyers, and submarines); specified budgetary limitations for naval armaments; rules of transfer of naval assets to another signatory and ship replacement and disposal; the numbers of planes (and

⁷¹See "Bases of Agreement," Department of State, Papers Relating to the Foreign Relations of the United States 1931, Volume I, pp. 380-382 for the full text of the agreement.

⁷²Burns and Urquidí, Disarmament in Perspective...Volume III: Limitation of Sea Power, pp. 162-163.

⁷³Denys P. Myers, World Disarmament--Its Problems and Prospects, World Peace Foundation, Boston, 1932, pp. 160, 161.

dirigibles) aboard aircraft carriers and ashore; civilian personnel and other material assets; and specified annual reporting procedures to the League of Nations.⁷⁴ These far-reaching ideas were given support by President Hoover who proposed that the "arms of the world be reduced by nearly one third," through cutting capital ships one third; aircraft carriers, cruisers, and destroyers one fourth; and submarines a third with maximum total tonnage of 35,000.

The effect of this plan would be to bring an enormous savings in cost of new construction and replacement of naval vessels. It would also save large amounts in the operating expense in all nations of land, sea, and air forces. It would greatly reduce offensive strength compared to defensive strength in all nations.⁷⁵

Hoover was supported in these and other non-naval arms control proposals by the smaller nations, especially the "Straight Eight," but failed to gain acceptance by the other members of the "Crooked Five" (the major naval powers).⁷⁶ The Conference continued for several years, with repeated political obstacles occurring between and among various participants. In 1933 Germany left the Conference (and the League) because

⁷⁴For a complete copy of the draft disarmament convention, see United States Congress, Senate, Committee on Foreign Relations, Subcommittee on Disarmament, Disarmament and Security, A Collection of Documents 1919-1955, 84th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., 1956, pp. 118-147.

⁷⁵Bartlett, The Record of American Diplomacy, pp. 497-499.

⁷⁶Tate, The United States and Armaments, p. 106. The Eight were Spain, Denmark, Sweden, Norway, Belgium, the Netherlands, Switzerland, and Czechoslovakia.

it was not fulfilling "its sole object, namely, general disarmament."⁷⁷ In fact it never reached that goal, as the deteriorating political situation in Germany and her moves to rearm and expand made talks of disarmament or even arms restraints useless. (Japanese moves in the Far East were equally unsettling but generally ignored in public conversation.)

Independent from the League of Nations World Disarmament Conference, another Conference on further naval limitations was being discussed in London. It was required by the 1930 London Naval Treaty, was set for December 1935, and involved several months of bi-lateral pre-conference meetings to establish areas of agreement (and disagreement). At these preliminary sessions in London, it became evident that: the United States wanted an all-around reduction up to 20 percent in naval tonnages, or at least a continuation of the restraints of the 1922 and 1930 Naval Treaties; Great Britain preferred a qualitative reduction by smaller gun-calibre (and an increased cruiser tonnage for the Empire); Japan wanted to abandon the ratio system established by the first two treaties, substituting rather a "common upper limit" for all powers, and she was going to give termination notice to the 1930 London Treaty anyway; and France and

⁷⁷Tate, The United States and Armaments, p. 112; and "By 1933 the 'have not' or 'renovating' states were highly dissatisfied; they looked forward to regaining their lost possessions or to expanding in other directions. The 'have' or resisting states, on the other hand, possessed territory which they knew was coveted, which they did not intend to relinquish peacefully, and which they were ready to defend by force of arms. Needless to say, the dissatisfied powers would not voluntarily accept their status as permanent, and the satisfied powers were equally determined to maintain their status quo; thus any plan for a limitation of armaments was bound to fail," p. 117.

Italy did not care for Great Britain's idea of unilateral declarations of six-year building programs.⁷⁸ Given the disparity of views expressed prior to the Conference, as well as the political situations in central Europe and China, the common grounds for any agreement were few indeed. Nevertheless, the Conference convened in December 1935, and a treaty was finally hammered out in March 1936. (While these negotiations were transpiring, Great Britain concluded an agreement that "the future strength of the German navy in relations to the aggregate naval strength of the Members of the British Commonwealth of Nations should be in the proportion of 35:100,"⁷⁹ thus attempting to cool if not turn off the potential naval arms competition between those two countries.⁸⁰ This 35 to 100 ratio did not apply to submarine tonnage in which they were to have parity with Great Britain,

⁷⁸"Report of the Delegates of the United States of America to the London Naval Conference, 1935," in Department of State, The London Naval Conference 1935--Report of the Delegates of the United States of America, Text of the London Naval Treaty of 1936 and Other Documents, Conference Series No. 24, U.S. Government Printing Office, Washington, D.C., 1936, pp. 1-3.

⁷⁹"Exchange of Notes between the Government of the German Reich and His Majesty's Government of the United Kingdom Regarding the Limitation of Naval Armaments. London, June 18th 1935," League of Nations Treaty Series, Volume 161 1935, Nos. 3701-3729, League of Nations Secretariat, Lausanne, 1937, pp. 9-16.

⁸⁰Germany, by the Versailles Treaty, had originally been limited to six battleships, six light cruisers, 12 destroyers and 12 torpedo-boats, and no submarines. She had also been limited to a 15,000 man Navy, and maximum tonnages for each category of ship (10,000 ton battleships, 6,000 ton cruisers, 800 ton destroyers, 200 ton torpedo-boats). She had no conscription and minimum voluntary enlistments of 12 years (25 for officers). See: United States Congress, Senate, Committee on Foreign Relations, Disarmament and Security..., pp. 8 and 9 for the naval clauses of the Versailles Treaty. Great Britain, by concluding this agreement in effect endorsed Germany's unilateral abrogation of the Versailles Treaty restrictions.

but the Germans agreed to build only to 45 percent of Britain, unless otherwise necessary.)

Shortly after the Conference began, it became apparent that Japan was not going to be able to persuade the other participants to accept her idea of a common upper limit even although it could be set low enough to reduce the naval tonnage of all present. Japan, therefore, withdrew from the Conference in January 1936.⁸¹ France and Italy continued to oppose any form of fixed ratios, thus ruling that out as a device for an agreement and the result was a qualitative approach restricting ship-size and gun calibre⁸² among Great Britain, the United States, and France. Italy did not sign for political reasons.⁸³

The Treaty ran until January 1943 and limited by quality only; there were no limits on the numbers of ships to be built within the categories, subject only to the advance notification and exchange of information procedures agreed upon in the Treaty. Capital ships were split into two categories of 10,000 tons and more and between 8,000 and 10,000 tons with gun-calibre of over or under 8 inches (a reference to "small" battleships of minor powers).⁸⁴ Aircraft carriers were

⁸¹Department of State, The London Naval Conference 1935...., p. 5.

⁸²Tate, The United States and Armaments, p. 190.

⁸³Department of State, The London Naval Conference 1935...., p. 6.

⁸⁴"Analysis of the Treaty and Protocol of Signature," United States Congress, Senate, Committee on Foreign Relations, Hearings on the London Naval Treaty, 1936, 74th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., May 1936, p. 23. The following description comes from this source unless otherwise identified.

redefined to be "primarily for carrying and operating aircraft at sea" (as opposed to such as seaplane tenders). Heavy and light cruisers and destroyers were classed as light surface vessels with maximum tonnage of 10,000 tons and guns of either 8 inches or 6 inches. Destroyers were limited to 3,000 tons or less and 6.1 inch guns, and submarines to 2,000 tons. There was, in effect, a construction "holiday" on cruisers until January 1943 and a technical "holiday" on capital ships between 8,000 and 17,500 tons, to keep a ship from being built and called capital but actually serving as a cruiser. Aircraft carriers were reduced in size to 23,000 tons (from 27,000) and could not carry more than 10 5.25 inch guns. Each signatory had to notify the others annually of her upcoming building programs and could not thereafter increase the numbers of ships or calibre of guns on them that year. Minor war vessels (not exceeding 2,000 tons or carrying guns more than 6.0 inches and not carrying torpedoes) were exempt from the construction announcement program, but had to be listed each year.

The provisions for advance notification of construction programs are new. ...The exchange of information required under the treaty concerning each individual ship is much more detailed than required under former treaties, and it must take place before instead of after a ship is laid down.⁸⁵

A signatory involved in war could suspend any or all of

⁸⁵U.S. Congress, Senate, Committee on Foreign Relations, Hearings on the London Naval Treaty, 1936, p. 26. See also: Foreign Office, Documents of the London Naval Conference 1935, December 1935-March 1936, His Majesty's Stationery Office, London, 1936, for the text of the various committees and meetings.

the treaty limits after notifying the others. A signatory could build any type of ship she deemed necessary if a non-signatory built one that did not conform to the treaty and which ship threatened a signatory power, provided the Treaty party first notified the other members and waited three months to commence construction. These last two strictures applied to the "national security" escalator clause, except that new construction, although it could violate the annual budget declaration, had to conform to the tonnage and gun calibre limitations. Both Great Britain and the United States approached Japan about adhering to the 1936 London Treaty, but she refused to accept either the gun calibre or the tonnage limits of that Treaty.

Although not a weapons restraint measure, the Montreux Convention may be viewed as a maritime measure in the field of arms control. The Treaty signed at Montreux actually replaced the earlier Peace Treaty of Lausanne of 1923, which had set up an international commission under the League of Nations to supervise the passage of warships and military aircraft in accordance with that Treaty.⁸⁶ There was complete freedom of transit for all merchant vessels, and few restrictions for

⁸⁶"Convention relating to the Regime of the Straits, signed at Lausanne, July 24, 1923," League of Nations Treaty Series, Lausanne, 1924, Nos. 1-4, 1924, League of Nations Secretariat, Lausanne, 1924, pp. 115-137, especially Articles 10-16 which govern the commission.

warships in peacetime.⁸⁷ Additionally Turkey, who did not supervise the Straits (although she had a member on the commission) had to demilitarize both sides of the Straits, the Sea of Marmara, and some of the Aegean Islands (Article 4).

As the League of Nations and its security system began to fail in the mid-1930's, Turkey sought a more acceptable agreement based (she hoped) on her control of the Straits which ran through her country.⁸⁸ The high contracting parties, although they did "recognize and affirm the principle of freedom of transit and navigation by sea in the Straits," returned essential control of the Straits to Turkey.⁸⁹ Again, merchant ships have complete freedom of transit in peacetime regardless of nationality, and in wartime if Turkey is a neutral. Warships have to conform to certain categories and numbers to qualify for transit privileges. For example, submarines must travel on the surface by daylight and must be going for repairs or joining their bases after construction or purchase (Article 12).

⁸⁷Three ships of one non-raparian state, none more than 10,000 tons, could pass through to the Black Sea in peacetime. There were also different rules governing passage in wartime depending on Turkey's being a neutral or belligerent, and whether or not the merchant or warships were neutral or belligerent. See, "Convention Relating to the Regime of the Straits....," League of Nations Treaty Series Volume 28...., pp. 121-125.

⁸⁸For an excellent description of the strategic importance of, and the continued diplomatic and military struggles over the Straits, see Ferenc A. Vali, Bridge Across the Bosphorus--The Foreign Policy of Turkey, The Johns Hopkins Press, Baltimore, 1971, especially Chapter 5.

⁸⁹"Convention Regarding the Regime of the Straits Signed at Montreux, July 20th, 1936," League of Nations Treaty Series, Volume 173, 1936-1937, Nos. 4001-4032, League of Nations Secretariat, Laussane, 1938, pp. 213-241.

Non-riparian states' warships passing into the Black Sea are limited by type, tonnage, and numbers (Articles 13-18). In wartime or threat of war, Turkey (as a belligerent) can control the straits completely, closing them as she desires. There are also procedures for notification of passage to Turkey, times for passage, duration of visits to the Black Sea, and other strictures. In addition to the tonnage, type, and numbers limits seen before, this Treaty involves geographic limits, involving definitions of what ships may pass through what areas of the waters, and under what circumstances. This Treaty⁹⁰ is still in effect today, one of the very few survivors of the pre-World War II efforts at arms restraints.

Great Britain persisted in her efforts to restrain the naval arms races throughout Europe. She managed to negotiate a bilateral treaty with Germany in 1937 which substantially paralleled the 1936 London Naval Treaty. She got this by also negotiating a similar bilateral naval treaty with the Soviet Union, which was worried about both German building in the Baltic and Japanese construction programs in the Pacific Ocean. (In addition to these two, Poland, Italy, Sweden, Norway, Denmark, and Finland had all acceded to the 1936 Treaty by end of 1938.)⁹¹ The two treaties accepted the various categories and sub-categories of the London Naval Treaty of 1936 as well as

⁹⁰ It was signed by Great Britain, Australia, Bulgaria, France, Greece, Rumania, Turkey, the Soviet Union, Yugoslavia, and Japan, who took the classification of the warships verbatim from the 1936 London Naval Treaty.

⁹¹ Burns and Urquidi, Disarmament in Perspective...Volume III Limitation of Sea Power, p. 240.

the gun-calibre stipulations cited therein. The same provisions for annual advance notification of building programs was included, as were the "escape" clauses involving the ship construction of non-signatory states and/or the needs of "national security" as they affected a High Contracting Party.⁹² Although not in the Treaty itself, Great Britain and Germany agreed, by way of a Declaration of the same date, that the 35 to 100 total tonnage ratio continued to exist; that there was some room for marginal variations within the tonnage limits by category for Germany as compared to Great Britain, and that the submarines continued to be bound by the 1935 Agreement. Otherwise, the tonnage restraints and construction holidays on certain cruisers and destroyers, as well as capital ship limits, were essentially the same as the 1936 Naval Treaty.⁹³ The Soviets did not have any special ratios with Great Britain (or any other state for that matter) nor did she attach any special significance to submarines or their building programs.

⁹²"Agreement Between the German Government and His Majesty's Government in the United Kingdom Providing for the Limitation of Naval Armament and the Exchange of Information Concerning Naval Construction. Signed at London, July 17th, 1937," and "Agreement Between His Majesty's Government in the United Kingdom and the Government of the Union of Soviet Socialist Republics Providing for the Limitation of Naval Armament and the Exchange of Information Concerning Naval Construction. Signed at London, July 17th, 1937," League of Nations Treaty Series, Vol. 187, Nos. 4328-4349, League of Nations Secretariat, Lausanne, 1939, pp. 44-77, and pp. 94-124 respectively, for full texts of the agreements and additional notes.

⁹³See "Declaration" League of Nations Treaty Series Vol. 187..., pp. 66-70.

Summary

Since the 17th Century, ideas about peace and disarmament have had a permanent place in the conversation and literature of this country. The first ideas were expressed through various parliaments or diplomatic negotiations, some accepting the varieties of states extant, others preferring to make all states the same size and strength. Some writers wished to use a federal army for enforcement while differing authors preferred a world court to adjudicate all disputes. One group of thinkers felt that public opinion would keep leaders from making war; yet another group thought that a congress would legislate the necessary steps to disarmament and peace. Some talked of complete disarmament for individual states with an international government to guard freedom. Others outlined plans for reductions of arms, with sufficient national forces to fight only defensive wars if necessary.

A reduction of armaments actually became a reality in the 19th Century on the Great Lakes, but it is evident that both parties wanted to agree and trusted each other enough to reach their stated goal. Besides, rearming could not really be done secretly on the Great Lakes and neither had any particularly sensitive "pressure points" in that area. These desires for peace and commitment to reductions or restraints were not evident at the First and Second Hague Peace Conferences. The United States, among others, was feeling the exhilaration of sailing with greater impact on the world's oceans and had no desire to limit these movements. She was willing to help

distressed persons at sea where needed and to fight in a humane manner, but not to restrict herself in any fundamental way unless everyone else did so, too (a safe prerequisite since the European powers seemed disinclined toward substantive restraints or reductions).

The post-World War I atmosphere breathed renewed life into two concepts relating to maritime arms control. The first was President Wilson's call for absolute freedom of navigation in peace or war, except for those limits imposed by the international organization, thus making illegal large navies used for commerce raiding and unnecessary (and perhaps illegal) large navies for fighting other navies. The second method was actually put to practice in the Versailles Treaty which severely limited the German navy in numbers of ships, types and tonnages of ships, numbers of personnel, and rules of their service. One might mention a third "road to peace" stated by President Wilson as the alternative to his freedom of navigation proposal; that was a huge navy, sufficiently large to ward off any war-like thoughts let alone actions towards the United States. Followed to its logical conclusion, however, this last argument would lead eventually to an arms buildup all around, rather than substantial reductions.

The Washington Naval Treaty of 1922 used several devices to gain arms restraints. In order to achieve these methods, however, each participant had to have the political will to support and sustain the compromises necessary in the mutual give-and-take of most diplomatic negotiations. The devices

used for attaining an agreement included a ratio of capital ships for each signatory, specific reductions of ships by name, a "holiday" on some building programs, tonnage limits (both to be retained and to be scrapped) within the categories of ships, and gun-calibre limits by ship type. This Treaty did not at all cover smaller combatants or submarines, but did anticipate another conference to consider scientific and technical developments. This conference, in another treaty, acknowledged the importance of geographic entities by agreeing not to fortify any further certain areas of the Pacific, but this referred to land fortifications only. (The Montreux Convention, fifteen years later, again used geographic tools for arms restraints, although in a more direct manner.)

Subsequent naval conferences in the 1920's foundered on the rocks of politics--the states attending or invited to attend these meetings did not have the national political interest or desire for a successful agreement based on mutually acceptable compromises. In other words, other political pressures, both domestic and international, were sufficiently strong and forceful to make agreements unreachable. After 1930, the forces influencing a reconsideration of maritime arms restraint rose again, perhaps for economic reasons (navies, large modern ones at least, are expensive to build and maintain), but also for political reasons. Political stability among the major world powers was declining and perhaps some leaders felt a need to stunt arms growth before it got out of hand and ran beyond control.

The 1930 London Naval Treaty, the result of this renewed

interest in arms restraints, used the "holiday" device for limiting capital ships, while gun-calibre and tonnage were measures for other ships. Building notification, replacement, and disposal procedures were all retained in this Treaty. The ratios no longer appealed to some members who considered the political inferiority conferred by a lesser number to be unacceptable.

Also, the Treaty had an "escape clause" allowing building beyond the Treaty if "national security" needs demanded these actions. The London Naval Treaty of 1930 further complicated arms restraints measures by increasing the numbers of ship categories and the calibre of guns within these groupings. This may be merely a reflection of the increasing complexity of naval warfare as technical and scientific developments refined ship design and weapons diversification. Interestingly, the time frame for the second major treaty was shorter than the first, having been reduced essentially from eight to six years, perhaps owing to the faster technological pace, but also to the declining stability of the world's political situation.

Contrary to the complex 1930 Treaty, the Turkish agreements with the Soviet Union and Greece were very simple in language and expectations--no reductions or limits, just a maintenance of the status quo through the stopping of naval ship building. Although these negotiations were bilateral (a possible reason for agreement and simplicity of wording) other attempts at two-power arrangements did not endure. Italy and France agreed for less than a month--the political influences (as well as their philosophies of security) differed too much for them to be brought together for any great duration.

By far the most comprehensive proposals on arms control were those outlined in the World Disarmament Conference sponsored by the League of Nations. It covered (and limited) every aspect of warfare from the amount of money and numbers of personnel (both civilian and military), to the specifics of ships and weapons by number and type, to the material reserves and industrial capacity of each country. It was a magnificent attempt, but fell victim to a degenerating world situation. Those participants who continued negotiating did so with one eye looking toward the increasingly stormy political atmosphere in Europe and Asia. Soon self-protection through arms (and thus an increase in arms) became more important than self-protection through reduction of weapons.

The mid-1930's agreements indicated a further decline in the political environment and the influences favoring arms restraints. Great Britain made a bi-lateral agreement with Germany in which it was understood that, although they had submarine parity, Germany would build to only 45 percent of Great Britain's numbers. Germany, however, would not risk limiting herself in relation to any other nation by attending the 1936 Naval Conference. Japanese demands for a common upper limit on ships (thus indicating her rejection of inferior status along with Italy and France) were non-negotiable and she left the conference when the other parties refused to accept her plan. She objected strongly enough to refuse to negotiate except under her own guidelines--guidelines unacceptable to the other parties.

The 1936 Naval Treaty, as finally negotiated, removed all

ratios and numbers limits on ships and ship building. Some new administrative devices were developed including the annual report of future building programs from which a country could not deviate once it was announced, except for "national security" reasons. The qualitative strictures of tonnages and gun calibres were still used, as was a partial construction "holiday" in certain areas. Prohibitions were less and of vastly decreased importance, but prior announcements and adherence to stated building programs were of ascending importance. One might conclude that the signatories decided that more specific knowledge of what their potential enemies were building was better than lack of information, especially when extensive construction could no longer be prevented by treaty. This changed emphasis, of course, also gave each country greater maneuvering room for itself in the political and military arenas.

As will be seen in future chapters, techniques, methods, and formulae for arms control in the maritime arena are multiple in number and complex in application. They depend on the political atmosphere of the time, the numbers and interests of the participants, the economic and military forces in play, and the ultimate goals of the negotiators. More recent accords and attempts at agreements (see next chapters) have been beset with the same problems and negative forces as the efforts at arms restraints reviewed in this chapter. The circumstances, geographic regions, participants, and technologies alter over time, but the dominant factors of politics, economies, perceptions of international stability (or instability), and national will remain as most important in creating any arms restraint

agreements. Post-World War II arms control attempts relating to maritime interests encountered similar problems and similar attempts at solutions.

There seems to be some particular climate in which arms restraints proposals of a realistic and at least theoretically workable proportions can be nurtured. That atmosphere prevailed in the 1920's but seemed to grow stale in the 1930's as the political instabilities increased. When the international situation is too peaceful (if that is possible) states feel they do not need treaties of arms restraint or limitation among themselves. On the other hand, when the situation degenerates beyond a certain point, these same states feel they cannot, from a national security standpoint, "afford" these same agreements. In other words, when the level of tensions and hostilities between states or among groups of states begins to rise sharply, these states then perceive arms control attempts as being deleterious to their national interests because the other side might or could become militarily dominant if they themselves do not increase their own arms efforts. As political and military instability increase, states become afraid to refrain from arms building programs--afraid they will be caught short if fighting ensues. That middle ground between complete relaxation of tensions and pending hostilities is a very narrow area, and one whose growing season for the cultivation of substantive agreements is short.

CHAPTER II

POST-WORLD WAR II ARMS CONTROL ATTEMPTS AND AGREEMENTS DIRECTLY RELATING TO THE MARITIME SITUATION

Building a peace requires as much moral stamina as waging a war. Perhaps it requires even more, because it is so laborious and painstaking and undramatic. It requires undying patience and continuous application. But it can give us, if we stay with it, the greatest reward that there is in the whole field of human effort.

Harry S. Truman¹

Although the Second World War witnessed the extensive increase of arms, weapons, and material for fighting a destructive and lengthy battle, the desires for reductions of these armaments were not dead. In fact, they were reiterated during the hostilities. The Atlantic Charter of 1941 and the United Nations Declaration of 1942 supported these goals.² The end of this war in Europe brought the first manifestation of these sentiments, directed at Germany for the second time in less than 30 years. Great Britain, France, the United

¹"Address on Foreign Policy at the Navy Day Celebration in New York City. October 27, 1945," National Archives and Records Service, General Services Administration, Public Papers of the Presidents of the United States--Harry S. Truman, 1945, U.S. Government Printing Office, Washington, D.C., 1961, p. 435.

²"The Atlantic Charter, August 14, 1941," and the "Declaration by United Nations, January 1, 1942," in U.S. Congress, Senate, Committee on Foreign Relations, Disarmament and Security--A Collection of Documents 1919-1955, U.S. Government Printing Office, Washington, D.C., 1956, pp. 78-80. President Roosevelt and Prime Minister Churchill declared in part that, "(T)hey believe that all of the nations of the world, for realistic as well as spiritual reasons, must come to the abandonment of the use of force...the disarmament of such nations is essential. They will likewise aid and encourage all other practicable measures which will lighten for peace-loving peoples the crushing burden of armaments," p. 79. The U.N. Declaration supporting these principles was signed by 47 states.

States, and the Soviet Union agreed that, "All German armed forces, including land, air, anti-aircraft and naval forces... shall be and shall remain completely disarmed, demobilized and disbanded," and that they shall prevent the "manufacture, production, or importation of...(a)ll naval vessels of all classes, both surface and submarine, and auxiliary naval-craft...."³ The same words were used in the draft treaty concerning Japan a few weeks later.⁴

Although both states eventually regained self-government and control of their own armed forces, the initial treaties established total disarmament of these areas, with any necessary defense being provided by the four powers (three in the case of Japan because France was not a part of that effort). As the political differences among the former Allies became more evident in the late 1940's and early 1950's, the total disarmament of these two states turned from an asset into a liability and they were permitted (even encouraged) to rearm within limits.

The United Nations made several earnest and repeated attempts at "early general regulation and reduction of armaments and armed forces," including the exclusive control of

³"Draft Treaty on the Disarmament and Demilitarization of Germany," Department of State, The Department of State Bulletin, Vol. 14, No. 358, May 12, 1946, p. 815.

⁴"Draft Treaty on the Disarmament and Demilitarization of Japan," Department of State, The Department of State Bulletin, Vol. 14, No. 365, June 30, 1946, p. 1113.

atomic energy and the prohibition of atomic weapons.⁵ All these efforts, as history indicates, were essentially unproductive, except in a negative sense in that there have been no world wars since 1945. The myriad other resolutions, declarations, and proposals were aimed at arms control in general and not until the late 1950's did any agreements pertaining to the maritime aspects of this problem appear, and then only narrow in perspective. But they are worth examining.

The Law of the Sea Conference Treaties

In 1958, under United Nations sponsorship, the international community completed its work of codifying some aspects of ocean use and activity. Certain portions of these treaties⁶ constrain, restrain, or limit the uses of the seas by elements of maritime warfare. In the Territorial Sea Treaty, the coastal state has sovereignty over its territorial sea, the airspace above that sea, and the bed and subsoil under it (Articles 1 and 2). Baselines for this sea may be straightlines between islands or points of a deeply indented coastline (Article 4). Coastal states may under certain circumstances (and without discrimina-

⁵See: "Principles Governing the General Regulation and Reduction of Armaments: Resolution of the United Nations General Assembly, December 14, 1946"; "Essentials of Peace: Resolution Approved by the United Nations General Assembly, December 1, 1949"; "Peace Through Deeds: Resolution of the United Nations General Assembly, November 17, 1950"; in U.S. Congress, Senate, Committee on Foreign Relations, Disarmament and Security..., pp. 82-85.

⁶There are four treaties of 1958: the Convention of the Territorial Sea and Contiguous Zones; the Convention on the High Seas; the Convention on the Continental Shelf; and the Convention on Fishing and Conservation of Living Resources on the High Seas.

tion among foreign ships) "suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security." But, "there shall be no suspension of the innocent passage of foreign ships through straits which are used for international navigation between one part of the high seas and another part of the high seas or the territorial sea of a foreign State,"⁷ (Article 16). Further strictures require any warship to "comply with the regulations of the coastal State concerning passage through its territorial sea" or leave that sea (Article 23). The nature of the possible requirements are not specified.⁸

This treaty also defined a zone "contiguous" to the territorial sea in which the coastal state can exercise control relating to the prevention of customs, fiscal, immigration, or sanitary violations (Article 24). The contiguous zone is measured from the same baseline as the territorial sea and may not be wider than 12 miles. The Treaty, however, does not delimit, or in any way indicate the breadth of the territorial

⁷"Law of the Sea: Convention on the Territorial Sea and the Contiguous Zone," in Department of State, United States Treaties--Treaties and Other International Acts Series, 5614-5700, U.S. Government Printing Office, Washington, D.C., 1965, TIAS 5639, p. 6, herein after referred to as, "The Territorial Sea Treaty," TIAS 5639.

⁸Requirements of this type might include a request by the coastal state that the warship declare her ultimate destination, or how many nuclear weapons she is carrying, or other classified or unclassified questions. In the case of U.S. ships, the questions, particularly about nuclear weapons are not answered and the ship exits the area. From a conversation with a U.S. senior Navy lawyer, Washington, D.C., Summer 1974.

sea and, therefore, the territorial seas claimed by many coastal states are much broader than their contiguous zones.⁹ This omission was deliberate because even in 1958 the conference participants could not agree on a common width for their territorial seas.

The same United Nations conference on the Law of the Sea drafted the Convention on the High Seas, which are defined as "all parts of the sea that are not included in the territorial sea or in the internal waters of a State" (Article 1).¹⁰ The freedoms of the high seas include those of navigation, fishing, laying of submarine cables and pipelines, and overflight (Article 2).¹¹ The High Seas Treaty grants warships "complete immunity from the jurisdiction of any State other than the flag State"; this applies also to non-warships, owned by a government and used for "non-commercial service" (Articles 8 and

⁹See Appendix II for the territorial sea claims of various coastal states of interest to the North Atlantic Alliance."

¹⁰"Law of the Sea: Convention on the High Seas," in Department of State, United States Treaties--Treaties and Other International Acts Series, 5200-5252, U.S. Government Printing Office, Washington, D.C., 1963, TIAS 5200, herein after referred to as "The High Seas Treaty," TIAS 5200.

¹¹Interestingly, this Treaty states that non-coastal (land locked) states "should have free access to the sea" by agreement with the coastal state. This agreement should include reciprocal freedom of transit and equal treatment within sea-ports of the coastal state (Article 3). Article 2 also mentions other unspecified freedoms "recognized by the general principles of international law."

9).¹² Warships may send a boarding party aboard a foreign merchant ship only if the former suspects piracy, slaving, or that the merchant is in reality of the same flag as the warship (Article 22). "Warships or military aircraft, or other ships or aircraft on government service specially authorized" may exercise the right of hot pursuit of a foreign ship, but only under strict guidelines. The pursuit must start when the foreign ship is in the internal, territorial, or contiguous waters of the coastal state, must not be an interrupted pursuit, must be due to a distinct violation of the coastal states' rights, and ends when the foreign ship enters her own or third country's territorial sea (Article 23).

The remainder of the Treaty covers the prevention of pollution on the high seas, the right to lay cables and the care thereof, and the responsibilities for damaging these cables. The coastal state has the right to explore and exploit the continental shelf, but may not impede the laying or maintenance of these cables (Articles 24-29).

The third of the 1958 Law of the Sea treaties covered the continental shelf and has only a tangential effect on warships. This Treaty allows the exploration of the continental

¹²These include, but are not limited to oceanographic research ships, government owned but civilian manned auxiliary ships used to service naval ships, government-owned civilian manned troop transports, etc.

shelf¹³ and the exploitation of its natural resources, but not any "unjustifiable interference with navigation" in "recognized sea lanes" (Article 5). The coastal states, however, exercise sovereign rights over the continental shelf for purposes of exploration and exploitation and may build installations or other devices to these ends (Articles 2 and 5). "Ships of all nationalities must respect the safety zones" of up to 500 meters around these installations.¹⁴ There are no restrictions as to the size of, or type of equipment on, these installations except that they be used for the "exploration and exploitation of the shelf's natural resources." Also, this Treaty does not examine the rights of any states governing the deep ocean floor beyond the continental shelf.

¹³The continental shelf refers to "the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 meters or, beyond that limit, to where the depth of the superadjacent waters admits of exploitation of the natural resources of the said areas and to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands." Article 1, "Law of the Sea: Convention on the Continental Shelf," in Department of State, United States Treaties--Treaties and Other International Acts Series, 5516-5580, U.S. Government Printing Office, Washington, D.C., 1964, TIAS 5578, herein after referred to as "The Continental Shelf Treaty," TIAS 5578.

¹⁴The continental shelf may be defined as "the shallow part of the sea floor immediately adjacent to and surrounding the land...and covers a large area: approximately one-sixth of the world." David A. Ross, Introduction to Oceanography, Appleton, Century, Crofts, New York, 1970, p. 261. See Appendix III for a diagram of the Continental Margin (including the shelf) and the Ocean Basin.

The last of these 1958 Law of the Sea treaties¹⁵ deals strictly with fishing and the conservation of these resources. It did not define fishing boats or their equipment, or the fishing grounds involved, except that they are high seas areas.

These 1958 Law of the Sea treaties avoided as many problems as they attempted to solve. The Territorial Sea Treaty failed to provide a measurable distance for that sea, although the assumption is somewhere under 12 miles because the contiguous zone adjacent to the territorial sea cannot be more than 12 miles at its outer limit. The treaty permits the innocent passage of foreign ships, including warships, through straits which are used for international navigation between two high seas areas or into a state's territorial sea, but does not further define either straits or the constitution of international navigation. By the same token, these same international straits are assumed, by definition, to be part of the high seas ("all parts of the sea that are not included in the territorial sea or in the internal waters of a State"). The Continental Shelf Treaty has an unlimited loophole in its statement of depth limit beyond the 200 meters as being the exploitable depth. This latter is limited only by expanding technology. Some of these problems were not foreseen in 1958, but others were deliberately ignored in order to achieve some

¹⁵"Law of the Sea: Convention on Fishing and Conservation of the Living Resources of the High Seas," in Department of State, United States Treaties--Treaties and Other International Acts Series, 5882-5984, U.S. Government Printing Office, Washington, D.C., 1966, TIAS 5969, herein after referred to as "The 1958 High Seas Fishing Treaty," TIAS 5969.

agreement--this being thought better than none at all.¹⁶ What few restraints were mentioned in these treaties may be considered as geographic in nature because they in no way differentiate between or among types or nationalities of warships.

In a well-publicized move in 1961, the General Assembly responded to the expressed desires for general and complete disarmament and to the French nuclear weapons test in the Sahara Desert by resolving that Africa be declared a denuclearized zone. This Resolution expressed concern about radioactive fallout and the arms race of "the Powers." To avoid these problems it called upon the member states of the United Nations to refrain from nuclear testing in Africa, to

refrain from using the territory, territorial waters or air space of Africa for testing, storing or transporting nuclear weapons,

and to consider the continent as a denuclearized zone.¹⁷ The Resolution did not define the territorial waters of Africa, nor did it regulate the transporting of nuclear weapons in or through these waters. It ignored any implicit conflict between the innocent passage of warships and this resolution. It was

¹⁶Department of the Air Force, Air Force Pamphlet 110-20, Selected International Agreements, Headquarters U.S. Air Force, Washington, D.C., June 1973, pp. 7-1, herein after referred to as AFP 110-20, Selected International Agreements.

¹⁷"General Assembly Resolutions 1652 (XVI): Consideration of Africa as a Denuclearized Zone, November 24, 1961," in United States Arms Control and Disarmament Agency, Documents on Disarmament 1961, U.S. Government Printing Office, Washington, D.C., 1962, pp. 647-648; herein after referred to as ACDA, Documents on Disarmament 1961.

aimed primarily at above ground weapons testing in the desert, and not the newly created submarine launched ballistic missiles or the coming nuclear weapons carrying surface warships. At any rate, none of the nuclear powers approved the Resolution, preferring to abstain from voting.¹⁸

The Latin American Nuclear Free Zone

In late 1964, the Latin American nations began a Preparatory Conference, convened to draft a treaty creating a nuclear-free zone in their area. After more than two years of work, the 21 nations involved in this effort met in a final session to

contribute, so far as lies in their power, towards ending the armaments race, especially in the field of nuclear weapons, and towards strengthening a world at peace...¹⁹

This Treaty prohibits and prevents within the territories of the signatories the "testing, use, manufacture, production or acquisition" of nuclear weapons, as well as their receipt, storage, installation, or deployment either directly or indirectly (Article 1). Of equal, or perhaps greater importance here, is the definition of territory used.

¹⁸ ACDA, Documents on Disarmament 1961, p. 648.

¹⁹ "Treaty for the Prohibition of Nuclear Weapons in Latin America with Additional Protocol I," and "Additional Protocol II to the Treaty for the Prohibition of Nuclear Weapons in Latin America," AFP 110-20, Selected International Agreements pp. 8-9; herein after referred to as "The Latin American Nuclear Free Zone Treaty," "Protocol I," and "Protocol II."

For the purposes of this Treaty, the term 'territory' shall include the territorial sea, air space and any other space over which the State /a signatory/ exercises sovereignty in accordance with its own legislation. (Article 3)

And

The zone of application of this Treaty is the whole of the territories for which the Treaty is in force. (Article 4)

The zone of application, described in detailed latitude and longitude, covers an enormous amount of territory, barely missing Bermuda and the Hawaiian Islands and including great portions of the Atlantic, South Atlantic, and South Pacific Oceans.²⁰ It further defines a nuclear weapon, but differentiates between a weapon and an "instrument that may be used for the transport or propulsion of the device.../that/ is separable from the device and not an indivisible part thereof" (Article 5).

The remainder of the Treaty discussed an organization to handle the peaceful development of nuclear energy, its relation with the International Atomic Energy Agency, and other housekeeping procedures. The Protocol I applied the Treaty to those areas within the nuclear free zone which, de jure or de facto, are the responsibility of non-signatory major powers

²⁰ Article 4. Perhaps the inclusion of such large expanses of water were necessary to accommodate the claimed territorial seas of several of the Latin American nations. See Appendix II for information on these claims. It also specifically excludes the continental part of the U.S. and her territorial waters.

(specifically, the United States, Great Britain, and France).²¹ Protocol II, which the United States and Great Britain signed,²² is an affirmation by the acceding parties outside the zone that they will do nothing to contribute to the violation of the Treaty. The United States Senate, however, "understood and declared" that it deems relevant only those portions which are compatible with international law (non-recognition of extended territorial seas claims); that the United States, regardless of the Treaty, retains exclusive rights to grant or deny transit and transport privileges (the Panama Canal and other high seas areas); and that the U.S. could use nuclear weapons in Latin America if she were attacked by an alliance of a Latin country and a non-Latin nuclear power.²³

Theoretically, this Treaty closes off large areas of the oceans to any naval warships carrying nuclear weapons aboard.

²¹Henry Giniger, "Latin Nuclear Ban Treaty Approved, but Faces Snags," The New York Times, February 13, 1967, pp. 1 and 14. Great Britain retains several Caribbean Islands, as well as the Faulkland Islands in the South Atlantic. France classifies Guadeloupe and Martinique as integral parts of metropolitan France and thus had a constitutional problem deciding whether or not to make a special case for them. And the United States refused to include the Virgin Islands or Puerto Rico in the zone, although they agreed to include Guantanamo Bay, Cuba, if Cuba signed. She did not. None of these three signed Protocol I. See also: Henry Giniger, "21 Hemisphere Nations Hopeful as Talks Open on Atom Curb," The New York Times, February 2, 1967, p. 18.

²²"Additional Protocol II to the Treaty for the Prohibition of Nuclear Weapons in Latin America," Department of State, United States Treaties and Other International Agreements, Volume 22, Part I, 1971, U.S. Government Printing Office, Washington, D.C., 1972, TIAS 7137, 22 UST754, p. 754.

²³"Protocol II," AFP 110-20, Selected International Agreements, pp. 8-19 to 8-20.

It makes allowances for nuclear or conventionally powered ships not carrying nuclear weapons, as they are "separable from the /nuclear/ device and not an indivisible part thereof." Since "territory" includes the territorial sea and the air space claimed by each signatory according to "its own legislation," it prohibits overflight, in this vast area, of planes carrying nuclear weapons regardless of their destinations; neither does it allow for transit (innocent passage) of naval warships carrying nuclear weapons. It does not even permit merchant ships whose cargo includes nuclear weapons to sail through the area. If enforced, then, it could be one of the most extensive of geographic restraints in the maritime area of arms control.²⁴

The Baltic Continental Shelf Declaration of 1968

In an otherwise undistinguished declaration among the Soviet Union, Poland, and the German Democratic Republic on the Baltic Continental Shelf, a new phrase appears. In October of 1968, these three states signed a declaration to "confirm and further develop the provisions contained in the 1958 Geneva Convention on the Continental Shelf in conformity with the concrete conditions of the Baltic Sea...."²⁵ The declaration reaffirmed the states' rights to explore and exploit the

²⁴The U.S. and Great Britain signed only Protocol II. France, the U.S.S.R., and the PRC have not signed the Treaty or either Protocol. Neither has India.

²⁵"German Democratic Republic-Poland-U.S.S.R. Declaration on the Continental Shelf of the Baltic Sea," International Legal Materials Current Documents, Vol. 7, 1968, The American Society of International Law, Washington, D.C., 1969, p. 1393. Translated from Izvestia, October 24, 1968, p. 2, by William E. Butler.

natural resources of the shelf, but failed to mention anything about the rights of scientific research as the 1958 Continental Shelf Treaty had.²⁶ The interesting feature is paragraph three: "The continental shelf of the Baltic Sea must be used by all states exclusively for peaceful purposes." Peaceful purposes and continental shelf are nowhere defined or expanded upon, but the possibilities are almost limitless. Other Baltic states may accede to the declaration, but none has so far.²⁷ It certainly could be viewed as a possible arms control or restraining measure, as it apparently is by a Soviet representative to the United Nations, who said that the "whole of the seabed and the ocean floor must be used for exclusively peaceful purposes." This includes the all continental shelves, one of which has been reserved for this purpose by the Baltic Sea Declaration of 1968.²⁸

The concept of a sea-bed and an ocean floor used for peaceful purposes is given at least partial expression in the Seabed Treaty.

²⁶William E. Butler, "Notes and Comments--The Soviet Union and the Continental Shelf," American Journal of International Law, Vol. 63, No. 1, January 1969, p. 107.

²⁷The Baltic Sea States are: Norway, Sweden, Finland, the U.S.S.R., Poland, the GDR, the Federal Republic of Germany, and Denmark.

²⁸"United Nations General Assembly, Provisional Verbatim Record of the Fifteen Hundred and Ninety-Second Meeting First Committee, 31 October 1968," in Moshe Y. Sachs, editor, Worldmark International Documentation--Sea-Bed 1968, Volume B-2, Worldmark Press, Ltd., New York, 1970, p. 678.

The Seabed Arms Control Treaty of 1971

The Conference of the Committee on Disarmament, meeting regularly in Geneva, began working on a seabed arms control measure in 1968, as a preventive rather than remedial measure. After more than two years of negotiations, the Treaty was adopted by the United Nations General Assembly on December 7, 1970.²⁹ Interestingly, the draft from which the final Treaty was negotiated had been a joint presentation by the United States and the Soviet Union. The latter had "started with a proposal for a comprehensive ban on all military uses of the seabed," but later moved sufficiently close to the American position to generate a joint effort.³⁰ The Treaty, with 85 signatories by the end of 1971³¹ is a popular one, perhaps because no one is presently interested in using the seabeds for nuclear or other weapons.

The Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof was

²⁹"Treaty on Seabed Arms Will Be Signed Thursday," The New York Times, February 9, 1971, p. 12.

³⁰Benjamin Welles, "Ban on Atom Arms on Seabed Signed in Three Capitals," The New York Times, February 12, 1971, pp. 1, 5.

³¹So far, 52 nations have deposited their ratifications or accession to this Treaty. Department of State, Treaties in Force--A List of Treaties and Other International Agreements of the United States in Force on January 1, 1974, U.S. Government Printing Office, Washington, D.C., 1974, p. 391.

signed in Moscow, London, and Washington on February 11, 1971,³² and calls for "the exploration and use of the seabed and the ocean floor for peaceful purposes." To this end, the signatories

undertake not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a seabed zone, as defined in Article II, any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons (Article 1).

It specifically excludes the territorial seas of a coastal state and starts the Treaty zone at the 12 mile contiguous zone outlined in the 1958 Territorial Sea Treaty (Article 2). This raises some potential problems with those nations claiming a territorial sea of more than 12 miles, but this Treaty states that it neither supports nor prejudices the claims of these countries with respect to recognition or non-recognition of territorial seas and contiguous zones (Article 4).

Each state has the right "to verify through observation the activities of other States Parties...on the seabed and the ocean floor and in the subsoil thereof" in the prescribed zone, but may not interfere with any activities (Article 3). Parties still doubtful about another's activities may consult with that suspected signatory, as well as other members. They may investigate and discuss further, but no action is prescribed.

³² See "Multilateral--Seabed Arms Control," Department of State, United States Treaties and Other International Agreements Volume 23, Part 1, 1972, U.S. Government Printing Office, Washington, D.C., 1973, pp. 701-709, herein after referred to as "The Seabed Arms Control Treaty," 23 UST 701.

The Parties also "undertake to continue negotiations in good faith concerning further measures in the field of disarmament" to prevent a seabed arms race and will review the operation of the Treaty after five years (1977) (Articles 5 and 7).

While this Treaty may be considered "a modest step among many,"³³ it nevertheless excludes large parts of the seabed and the ocean from military use.³⁴ This Treaty must be based, at least in part, on the "assumption that it is easier to exclude weapons from an environment to which they have not yet been introduced than to limit or remove them where they already exist."³⁵ It seems apparent, at least for the present, that this geographic and weapons-type arms restraint or limitation measure was attainable because neither technological development nor political inclination were directed toward use of the seabed, the ocean floor and the subsoil thereof.

This new (or perhaps renewed) interest in direct maritime arms control measures manifested itself later that year in the United Nations where more than a dozen nations followed the footsteps of the Latin Americans in advocating restrictions in the Indian Ocean area.

³³"Remarks by President Nixon on the Signature of the Sea-Bed Treaty, February 11, 1971," in Arms Control and Disarmament Agency, Documents on Disarmament 1971, U.S. Government Printing Office, Washington, D.C., 1972, p. 12 herein after referred to as ACDA, Documents on Disarmament 1971.

³⁴ACDA, Documents on Disarmament 1971, pp. 933-934.

³⁵James E. Dougherty, How to Think About Arms Control and Disarmament, National Strategy Information Center, Inc., Crane, Russak and Company, New York, 1973, p. 152.

The 1971 Indian Ocean Zone of Peace Proposals

A draft resolution was submitted to the First (Political) Committee of the General Assembly which called for

the littoral and hinterland States of the Indian Ocean to preserve their independence, sovereignty and territorial integrity, and to resolve their political, economic and social problems under conditions of peace and tranquility...³⁶

They mentioned a 1970 Conference³⁷ which advocated that the Indian Ocean be declared a zone of peace which would exclude "Great Power rivalries and competition as well as bases" and would be "free of nuclear weapons." Military Alliances were disavowed as costing too much; they preferred to expend their limited resources on "the more compelling and productive task of economic and social reconstruction..." A zone of peace would "arrest" an arms race in that area and to this purpose they declared that

(T)he Indian Ocean, within limits to be determined, together with the air space above and the ocean floor subjacent thereto, is hereby designated for all time as a Zone of Peace.³⁸

³⁶"Eleven Nation Draft Resolution Submitted to the First Committee of the General Assembly: Declaration of the Indian Ocean as a Zone of Peace, November 30, 1971," ACDA, Documents on Disarmament 1971, pp. 807-808. The original states were Ceylon, Iran, Iraq, Kenya, Somalia, Uganda, Tanzania, Yemen, Zambia, and later Burundi and Swaziland. These 11 were subsequently joined by India and Yugoslavia. This Resolution is herein after referred to as the "Indian Ocean Zone of Peace Resolution of 30 November 1971."

³⁷The Lusaka Declaration of the Third Conference of Heads of State or Government of Non-Aligned Countries of September 1970.

³⁸"Indian Ocean Zone of Peace Resolution of 30 November 1971 " ACDA, Documents on Disarmament 1971, p. 808.

This Resolution further asked for Great Power consultations to halt "further escalation and expansion of their military presence" there, and to eliminate existing military bases, installations, supply facilities, and any nuclear weapons or weapons of mass destruction in the Zone of Peace. They stated finally that

(W)arships and military aircraft may not use the Indian Ocean for any threat or use of force against the sovereignty, territorial integrity and independence of any littoral or hinterland State of the Indian Ocean in contravention of the purposes and principles of the Charter of the United Nations

and that

(S)ubject to the foregoing, the right to free and unimpeded use of the zone by vessels of all nations is unaffected.³⁹

After a little more than two weeks of debate, the General Assembly adopted a slightly revised Indian Ocean Peace Zone resolution.⁴⁰ Unfortunately, the notion of a Zone of Peace failed to define that zone ("within limits to be determined"), thus perhaps fatally weakening the concept even before it was adopted. The Resolution does not define bases or installations or facilities of the Great Powers who must remove these units, nor does it name the Great Powers, some of which may be merely protecting their own territories within this

³⁹"Indian Ocean Zone of Peace Resolution of 30 November 1971," ACDA, Documents on Disarmament 1971, p. 809.

⁴⁰"General Assembly Resolution 2832 (XXVI): Declaration of the Indian Ocean as a Zone of Peace, December 16, 1971," in ACDA, Documents on Disarmament 1971, pp. 901-903.

undelimited area.⁴¹ Of the nuclear powers, only the People's Republic of China supported the proposal; the other four abstained and no nation voted against the Resolution. Further work within the United Nations has been done on this consideration, but definition of terms, both geographic and territorial, is difficult, and runs into other international laws and agreements, as the High Seas Treaty, the Nuclear Non-Proliferation Treaty, and various bilateral and multilateral security agreements. Although the myriad problems have been noted, few solutions seem to be available.⁴²

The Strategic Arms Limitation Talks Accords of 1972

Even while the Seabed Treaty of 1971 was being negotiated in Geneva, another, bilateral, arms control attempt was being pursued by the United States and the Soviet Union. In January of 1967, President Johnson wrote to Premier Kosygin saying that the Soviet anti-ballistic missile system then being built by the Soviet Union would cause the United States in turn to seek to overcome it with increased penetration capabilities.

⁴¹ France and Great Britain have territories which may be included in the Zone of Peace and may desire or need to fortify these places. If, however, Great Powers means the United States and the Soviet Union, then neither has any national territory within the areas, although both have temporary and permanent military and naval units there. If "Great" means nuclear, then France and Great Britain are caught in a difficult situation if they accept this Zone.

⁴² For an interesting examination of this, see: United Nations General Assembly, Report of the Ad Hoc Committee on the Indian Ocean, Official Records, Twenty-Eighth Session, Supplement No. 29 (A/9029), United Nations, New York, 1973, especially the Sri Lanka working paper and the excerpts from statements made during the general debate, pp. 5-23.

A United States increase in its offensive capabilities and defenses would then generate a similar Soviet response. Premier Kosygin responded that the Soviets were "prepared to continue the exchange of views" on this matter.⁴³ These exchanges of views proceeded at a leisurely pace, but in August of 1968 the Soviet Union invited President Johnson to visit Moscow in October to begin the talks.⁴⁴ The Soviet move into Czechoslovakia that same month ended any hopes of an October visit, although President Johnson tried to reschedule the meeting later in the fall. The Soviets were not interested then, preferring to deal with the incoming administration.⁴⁵ President Nixon, in turn, desired to review the whole situation which meant a further delay until the late fall of 1969.⁴⁶

The Strategic Arms Limitation Talks started in 1969 and alternated between Helsinki and Vienna from then until May of 1972, when President Nixon travelled to Moscow to sign the bilateral accords between the two superpowers. In the last few months of negotiations the question of the submarine launched

⁴³Lyndon B. Johnson, The Vantage Point--Perspective of the Presidency 1963-1969, Holt, Rinehart and Winston, New York, 1971, pp. 479-480.

⁴⁴Johnson, The Vantage Point..., pp. 485-488.

⁴⁵Bernard Gwertzman, "Five Year Effort for an Arms Curb Began with Secret Johnson Letter to Kosygin," The New York Times, May 27, 1972, p. 9.

⁴⁶For an excellent chronicle of the story of the Strategic Arms Limitation Talks, including the 1960's background information, see: John Newhouse, Cold Dawn--The Story of SALT, Holt, Rinehart and Winston, New York, 1973, particularly Chapters 2 and 3 for background and initial maneuverings.

ballistic missiles became a crucial issue.

(S)ome American negotiators reportedly fear that the Kremlin has invested so much capital in developing new undersea weapons and construction facilities that it will continue to reject American proposals for a ceiling on submarine-based missiles.⁴⁷

A slightly different view as to why no agreement could be reached on strategic missile submarine launchers surfaced in May. The Soviet Union reportedly refused to consider any underwater limitations unless the United States agreed to include forward-based tactical aircraft in Europe and aboard carriers in the Mediterranean Sea.⁴⁸ Yet a third reason may have been that the Soviet Union was sufficiently inferior in submarine technology and development that she was unwilling to formalize this inferiority by treaty or agreement.⁴⁹

At the same time, the Joint Chiefs of Staff apparently told President Nixon that they "could not support an offensive arms agreement unless submarine launched missiles were included."⁵⁰ President Nixon sent Mr. Kissinger on a secret trip

⁴⁷Hedrick Smith, "Deadlock on Submarines Said to Persist in Vienna," The New York Times, January 12, 1972, pp. 1, 13. See also: Newhouse, Cold Dawn..., pp. 237-238.

⁴⁸Robert B. Semple, Jr., "U.S. Voices Hope of Expanded Pact on Limiting Arms," The New York Times, May 2, 1972, pp. 1, 5.

⁴⁹Newhouse, Cold Dawn..., p. 239.

⁵⁰Bernard Gwertzman, "Strategic Arms Talks: Long Road to Success," The New York Times, June 18, 1972, pp. 1, 16. See also: Bernard Gwertzman, "Nixon Says Pact on Arms Depends on Moscow Trip," The New York Times, March 25, 1972, pp. 1, 5, in which is stated the fact that the United States was demanding inclusion of SLBM's in the accord on offensive weapons.

to Moscow and persuaded the Soviet Union to include submarines in the accord.

In doing a deal with the Americans on offense, Brezhnev was influenced much less by strategic calculation than by the politics of his foreign policy. Nixon and Kissinger were right to insist that he accept a link between offense and defense.⁵¹

The summit meeting in Moscow in the latter part of May generated several agreements between the two sides including such things as "measures designed to establish more favorable conditions for developing commercial and other economic ties"; "increased scientific and technical co-operation on the basis of mutual benefit and shared effort"; "further bilateral co-operation in space"; "an agreement on health co-operation... on the common enemies, disease and disability"; and "a programme of co-operation in the protection and enhancement of man's environment."⁵² At the summit, the leaders also took note of other international situations.⁵³ They also outlined 12 basic principles of relations ranging from peaceful co-existence, to continued exchanges of views, to obligations to their allies.⁵⁴ All of these introductory statements, however, were preliminary to the heart of the meeting, the strategic arms

⁵¹Newhouse, Cold Dawn..., pp. 243-246 and 262.

⁵²"Communique of 29 May 1972," in Survival, Vol. 14, No. 4, July/August 1972, pp. 188-189.

⁵³"Communique...", Survival, pp. 189-191.

⁵⁴"Basic Principles of Relations," Survival, Vol. 14, No. 4, July/August 1972, pp. 191-192.

limitation agreements. These consist of a treaty limiting anti-ballistic missile systems, an interim agreement of intercontinental land-based and submarine-launched ballistic missiles, and agreed interpretations, common understandings, and unilateral statements relating to the agreement.⁵⁵

The Anti-Ballistic Missile System Treaty, among other things, prohibits the development, testing, or deploying of ABM systems or components which are "sea-based, air-based, space-based, or mobile-land based" (Article 5). The rest of the Treaty discusses limits and prohibitions of land based systems, using "national technical means of verification" (Article 12). The Interim Agreement and Protocol, on the other hand, deal extensively with maritime arms problems, both in and of themselves, and as they are linked to land based weapons systems.

The Soviet Union and the United States, desirous of creating "more favorable conditions for active negotiations on limiting strategic arms" and a "relaxation of international tensions," made several agreements on ballistic missiles. There will be no construction of additional land-based intercontinental ballistic missiles and severe limits on conversions from "light" to "heavy" ICBM's (Articles 1 and 2). Article 3 states that

⁵⁵"Treaty on Anti-Ballistic Missile Systems of 26 May 1972;" "Interim Agreement and Protocol on Strategic Offensive Missiles of 26 May 1972;" and "Agreed Interpretations, Common Understandings and Unilateral Agreements," in Survival, Vol. 14, No. 4, July/August 1972, pp. 192-194, 195-196, 196-199, respectively. Unless otherwise indicated, the following analysis uses these source documents.

The parties undertake to limit submarine-launched ballistic missile (SLBM) launchers and modern ballistic missile submarines to the numbers operational and under construction on the date of signature of this interim agreement, and in addition launchers and submarines constructed under procedures established by the parties as replacements for an equal number of ICBM launchers of older types deployed prior to 1964 or for launchers on older submarines.

The numbers agreed to in the Protocol are for the same period as the agreement, five years, and are specific for both sides. The United States cannot have more than 710 submarine ballistic missile launchers on 44 modern ballistic missile submarines, while the Soviet Union is limited to 950 launchers on 62 submarines. There are also numerical replacement limits stipulated (at a slightly lower level) for the launchers put on nuclear powered submarines, but the hull counts remain the same.⁵⁶ Again "national technical means of verification are used," with both parties refraining from "deliberate concealment measures" (Article 5).

The Agreed Interpretations pertain almost entirely to the anti-ballistic missile system treaty, although two interpretations deal with the time frame for dismantling old ICBM's or SLBM's when these are replaced by new submarines. All of the Common Understandings refer to the ABM Treaty also, from silo dimensions, to test ranges, to mobile systems. Two of the Unilateral Statements concern the Interim Agreement. One is an emphasis by the United States on Article 5, which discusses

⁵⁶For a description of the process of arriving at these numbers see: Newhouse, Cold Dawn..., pp. 244-256.

verification and abstention from use of deliberate concealment measures, "including in particular their application to fitting out or berthing submarines."⁵⁷ The only Soviet unilateral statement made deals with submarines. This paragraph links the total number of United States submarines with those of their NATO allies (Great Britain and France are not mentioned by name). The Soviet Union

Agrees that for the period of effectiveness of the interim 'freeze' agreement the US and its NATO allies have up to 50 such submarines with a total of up to 800 ballistic missile launchers thereon (including 41 US submarines with 656 ballistic missile launchers).⁵⁸

The Soviet Union reserves the right to increase its numbers by the same number of combined United States and NATO partner totals above the stated Soviet ceilings. This is the only way the Soviet Union can at least "partially compensate" for the other western ballistic missile submariners and United States submarine bases overseas. The United States rejected the "validity" of the Soviet statement, preferring to consider these as bi-lateral accords, not affecting the Allies' arms.

The Interim Agreement, of greater import here, is as important for what it does not cover as for what it does include. It temporarily freezes the numbers of intercontinental and submarine launched ballistic missile launchers to agreed upon numbers. It also limits the numbers of modern ballistic

⁵⁷"Unilateral Statement (A)(c)," p. 198 of Survival, Vol. 14, No. 4, July/August 1972.

⁵⁸"Unilateral Statement B," p. 198 of Survival.

missile submarines within stated totals. It does not cover any other types of ships or submarines, nor does it discuss other weapons of submarines, such as cruise missiles or torpedoes, as they are not considered "strategic." By the same token, it can be argued that ballistic missile submarines should not be considered a true part of maritime warfare because they are merely the platforms for carrying missiles. They do not participate in "traditional" sea warfare, rather they are mobile silos for missiles eventually to be used, not by the ship herself for intership combat (or even shore support), but by national command authorities on pre-selected targets.⁵⁹ This Agreement links the land- and sea-based intercontinental missiles through the exchange numbers and total figures, thus perhaps reinforcing the above theory. It does not link other types of ships or weapons systems either strategic or nuclear. It is a bilateral effort--other participants are neither required nor desired, except for the Soviet unilateral statement concerning other NATO submarines and launchers. Neither of those countries has accepted this view--nor has the United States.

The Interim Agreement and the companion Treaty are very narrow in their scope.

The arms race will go on, not only in the regular army, navy and air force weaponry that is unaffected by the accord, but also in the quality

⁵⁹For an excellent statement of this argument, see: Edward Wegener, "Theory of Naval Strategy in the Nuclear Age," Naval Review 1972, United States Naval Institute Proceedings, Vol. 98, No. 831, May 1972, pp. 190-207.

of nuclear warheads--that is, their size and accuracy and evasive skills--and in the arts of anti-submarine warfare and even in the technology of the missile defense systems that the treaty is to limit severely at inadequate levels.⁶⁰

The political reasons for the Treaty and the Interim Agreement are many and varied, but the results are narrow in scope and limited in objective.⁶¹ Perhaps it can be said here (as it has been of other agreements), that both sides agreed to give up, or not build, or not protect those things which they had no intention of keeping, building, or protecting in the first place. They may be viewed as quantitative, limiting a specific type of weapon and a specific platform for that weapon.

In addition to the already mentioned accords, another document was signed between the two states having to do with the maritime atmosphere. It is the Agreement on Prevention of Incidents Involving Warships.⁶² In it both parties want "safety of navigation" of their naval ships and aircraft and are "guided by the principles and rules of international law." Article 1 defines warships, auxiliary naval ships, aircraft,

⁶⁰Max Frankel, "A First Step, But a Major Stride," The New York Times, May 27, 1972, pp. 1, 9. See also: Robert B. Semple, Jr., "Questions and Answers on Arms Pacts," The New York Times, June 14, 1972, p. 18. He comments on the lack of qualitative agreements and says, additionally, that the Soviets may have refused an agreement on mobile land-based ICBM's because they feel the U.S. submarine "fleet has better positions in various bases around the world than the Soviet fleet."

⁶¹Hedrick Smith, "Soviet Says Arms Accords Show U.S. Accepts Parity," The New York Times, May 28, 1972, p. 24.

⁶²"Text of U.S.-Soviet Agreement on the Prevention of Incidents Involving Warships," The New York Times, May 26, 1972, p. 4. This accord is less reverently called the Chicken-of-the-Sea Agreement.

and naval formations. All commanding officers are to be instructed in the "rules of the road" ("the letter and the spirit of the international regulations for preventing collisions at sea") (Article 2). Articles 3 and 4 described the measures to be taken to avoid collisions at sea by ships and aircraft. This three year agreement exhorts both parties to use signals, radio, and international codes to warn of immediate or planned exercises, maneuvers, or "actions on the high seas which represent a danger to navigation or aircraft in flight" (Article 6).

Although not considered an arms control or arms restraint document, this accord is looked at as the first "military" agreement since World War II between the two parties.⁶³ It acknowledges that potential hazards do exist in this naval environment and that lack of restraint could lead to a more serious situation in the maritime arena. It has been included for this reason.

These, then, were the significant treaties and agreements pertaining to the maritime areas of interest as they relate to arms controls and/or restraints since World War II. There have been other proposals made or comments upon ocean aspects

⁶³Robert B. Semple, Jr., "Talks in Moscow Seek to Develop U.S.-Soviet Trade," The New York Times, May 26, 1972, pp. 1, 4. Discussions with an ACDA representative in February 1974 indicate that the Prevention of Incidents at Sea Agreement is merely a further formalization of already-recognized international law. It is not new and thus cannot be considered as an arms control measure. It does not appear in any ACDA or other USG documents seen by this writer as an arms control measure.

of arms problems which merit mention in this same time frame. The list of items reviewed is neither deep nor extensive. Rather, it may provide a small picture of the types of proposals which have been made.

Other Commentaries

In 1962, the United States submitted to the Eighteen Nation Disarmament Committee a proposal on general and complete disarmament.⁶⁴ Without examining the philosophy of the draft treaty, the maritime proposals are worth noting. For example, 30 percent reductions of armed combat aircraft, submarine-launched missiles, and "combatant ships with standard displacement of 400 tons or greater of the following classes: aircraft carriers, battleships, cruisers, destroyer types and submarines," would be executed according to a fixed time schedule. The aircraft, missiles, and ships would be categorized by armaments and types. Future production of these weapons systems would be based on destruction of existing systems according to an agreed-upon formula. Armed forces levels of personnel would be limited or reduced to 2.1 million

⁶⁴"United States Proposal Submitted to the Eighteen Nation Disarmament Committee: Outline of Basic Provisions of a Treaty on General and Complete Disarmament in a Peaceful World, April 18, 1962," in United States Arms Control and Disarmament Agency, Documents on Disarmament 1962, U.S. Government Printing Office, Washington, D.C., 1963, pp. 351-382. Unless otherwise indicated, all references to this draft treaty are from this source, herein after referred to as the "U.S. General and Complete Disarmament Proposed Treaty 1962," ACDA, Documents on Disarmament 1962. An earlier proposal called, "Programme for General and Complete Disarmament in a Peaceful World," was submitted by the U.S. in 1961. See: United States Arms Control and Disarmament Agency, Documents on Disarmament 1961, U.S. Government Printing Office, Washington, D.C., 1962, pp. 475-482.

for the United States and the Soviet Union and to other specified levels for other signatories. Subsequent stages of reductions were similarly designed with percentage reductions of weapons systems and personnel. Specific proposals were made for nuclear weapons, military bases and facilities, military research and development, and the strengthening of international peacekeeping arrangements during these stages of national reductions. The remainder of the draft treaty discussed the methods, procedures, and international machinery to be used in achieving these goals.

A previously submitted Soviet draft treaty⁶⁵ called for the scheduled elimination of: "(a)ll military aircraft capable of delivering nuclear weapons"; "all surface warships, capable of being used as vehicles for nuclear weapons, and submarines of any class or type"; and all bases, facilities, or fields used in support of a training for these weapons systems. All foreign bases would be dismantled and all troops stationed overseas would be withdrawn. Overall defense strengths of the United States and the Soviet Union would be reduced initially to 1.7 million each, with other parties having agreed limits. Conventional arms production, military expenditures, and home-based military equipments and facilities would be reduced and in some cases destroyed, according to a schedule. This draft

⁶⁵"Soviet Proposal Submitted to the Eighteen Nation Disarmament Committee: Draft Treaty on General and Complete Disarmament Under Strict International Control, March 15, 1962," in ACDA, Documents on Disarmament 1962, pp. 103-127. Unless otherwise indicated, all references to this draft treaty are from this source. This is herein after referred to as the "Soviet General and Complete Disarmament Proposed Treaty 1962," ACDA, Documents on Disarmament 1962.

treaty also provided for international machinery to supervise, run, and check the disarmament efforts world-wide. The Soviet proposal speaks of international organization "inspectors" and "independent and unrestricted control over the implementation of the present Treaty." On the other hand, the United States proposal states the international organization's "inspectors would have unrestricted access without veto to all places as necessary for the purpose of effective verification."

At the same time as the United States and the Soviet Union were making their global proposals, the Polish government tabled a more modest document concerning only central Europe.⁶⁶ This Plan did not specify types of weapons or systems or platforms, nor did it specify that the "zone" included the territorial waters of the states named.⁶⁷

The nuclear-free zone proposal appeared again a year later in a Soviet note to the Department of State in which the former expressed deep concern over the "creation of a NATO nuclear force which would give the West German Bundeswehr access to atomic weapons," and "the deployment of United

⁶⁶"Polish Memorandum Submitted to the Committee of the Whole of the Eighteen Nation Disarmament Committee: Rapacki Plan for Denuclearized and Limited Armaments Zone in Europe, March 28, 1962," ACDA, Documents on Disarmament 1962, pp. 201-205, herein after referred to as the "Rapacki Plan," ACDA, Documents on Disarmament 1962.

⁶⁷Poland, Czechoslovakia, German Democratic Republic, and the Federal Republic of Germany. The following year, Poland included territorial waters and air space in the Rapacki Plan. See: "Memorandum by the Polish Government on Freezing Nuclear and Thermonuclear Weapons in Central Europe, February 24, 1964," in United States Arms Control and Disarmament Agency, Documents on Disarmament 1964, U.S. Government Printing Office, Washington, D.C., 1965, pp. 53-55.

States nuclear submarines equipped with Polaris nuclear missiles in the Mediterranean area."⁶⁸ To allay the fears of the littoral states of the Mediterranean and to comply with the declaration of Africa as a nuclear-free zone, the Soviet Union "proposes that the whole area of the Mediterranean Sea should be declared a zone free from nuclear missile weapons." The American reply was pointed in its refusal to entertain the Soviet proposal, because the latter sought only to change the existing military situation in the Mediterranean to gain an advantage. The United States preferred to examine efforts aimed at "decelerating and halting the arms race" not just those aimed at unbalancing the military scales and tipping them in favor of one side.⁶⁹

Earlier that year the Soviet Union had proposed that "foreign territories" not be used for bases for nuclear strategic weapons systems, including "submarines carrying nuclear and rocket weapons" and "aircraft carriers having on board air-

⁶⁸"Soviet Note to the United States on Nuclear-Free Zone in Mediterranean, May 20, 1963," in United States Arms Control and Disarmament Agency, Documents on Disarmament 1963, U.S. Government Printing Office, Washington, D.C., 1964, pp. 187-193.

⁶⁹"Note From the United States to the Soviet Union: Nuclear-Free Zone in the Mediterranean, June 24, 1963," in ACDA, Documents on Disarmament 1963, pp. 242-243. At about the same time, the Finnish government called for a nuclear-free zone in Scandinavia with Finland, Sweden, Norway, and Denmark pledging "themselves not to acquire nuclear weapons or allow such weapons on their territory." Territory was not defined. "Kekkonen Renews Plea for Atom Ban," The New York Times, May 29, 1963, p. 6.

craft armed with nuclear weapons."⁷⁰ The United States never replied directly to the Soviet proposal, but the British did, saying that the

Polaris delivery system is becoming...a major factor in maintaining the peace, however uneasy a peace it is, which exists today. ...Polaris is, in fact, a most substantial move in the direction of choosing a delivery system which makes war by accident, or war by miscalculation, far less likely.⁷¹

This year 1964 was notable for its several proposals recommending budgetary reductions as a means of restraining armaments expenditures, but none of these proposals pertained directly or specifically to naval or maritime matters. Similar general statements were made about reducing "delivery vehicles" for nuclear missiles, but they, too, did not discuss ships or naval weapons systems by name. Indeed, it appears that the primary concern was still with land-based missiles

⁷⁰"Soviet Draft Declaration Submitted to the Eighteen Nation Disarmament Committee: Renunciation of Use of Foreign Territories for Stationing Strategical Means of Delivery of Nuclear Weapons, February 12, 1963," in ACDA, Documents on Disarmament 1963, p. 49.

⁷¹"Statement by the British Representative (Godber) to the Eighteen Nation Disarmament Committee [Extract], March 29, 1963," in ACDA, Documents on Disarmament 1963, p. 137.

and land-based bombers.⁷²

Vice-President Humphrey, the following year, mentioned that among other places, the Near (Middle) East might be an area ripe for regional nuclear arms control, but did not further define the area or the weapons involved.⁷³ Later in 1965, a White House Committee recommended

That the United States encourage the development of nuclear-free zones in Latin America, Africa, and the Near East, beginning with a U.S.-Soviet Treaty establishing a zone of nuclear and conventional arms limitation under U.N. inspection in the Bering Straits and including comparable areas in Alaska and Siberia.⁷⁴

No responses were made or initiatives taken on these proposals and they died.

These, then, are some examples of post-1945 proposals

⁷²For examples see the following, all from: United States Arms Control and Disarmament Agency, Documents on Disarmament 1964, U.S. Government Printing Office, Washington, D.C., 1965. "Statement by the Soviet Representative (Tsarapkin) to the Eighteen Nation Disarmament Committee: Gromyko Delivery Vehicles Proposals, February 4, 1964," pp. 23-32. "Statement by ACDA Director Foster to the Eighteen Nation Disarmament Committee: Reduction of Delivery Vehicles, February 11, 1964," pp. 37-42. "Brazilian Working Paper Submitted to the Eighteen Nation Disarmament Committee: Application of Savings on Military Expenditures, February 13, 1964," pp. 42-44. "Statement by the Soviet Representative (Tsarapkin) to the Eighteen Nation Disarmament Committee: Reduction of Military Budgets, February 20, 1964," pp. 49-52. "Memoranda Submitted to the Eighteen Nation Disarmament Committee by Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden, and the United Arab Republic, September 14, 1964," pp. 403-427.

⁷³"Peace on Earth," The Department of State Bulletin, Vol. 52, No. 1341, March 8, 1965, p. 329.

⁷⁴"Report of the Committee on Arms Control and Disarmament of the National Citizens' Commission on International Cooperation, November 28, 1965," in United States Arms Control and Disarmament Agency, Documents on Disarmament 1965, U.S. Government Printing Office, Washington, D.C., 1966, p. 578.

that could directly affect the maritime forces of a state or states. They are neither complete nor extensively examined. They are merely representative of the various discussions generated in the political arenas concerning various maritime arms control problems and proposed solutions.

Summary

The arms control agreements and attempts following World War II run the gamut from general and complete world-wide disarmament to small specific accords treating a single area or a single weapons system.

Total disarmament for a specific country was tried with Germany and Japan, but it failed for various political reasons, not the least of which was that their guarantors (the Allies) could not agree among themselves. These failures were followed by United Nations attempts at "reductions" of armaments, with international control of specific weapons through control of all atomic energy production.

The Law of the Sea treaties broadened in scope, but left many loopholes or areas untouched by any regulations because the parties could not agree. The Territorial Sea Treaty does not define by distance that sea although it says what can and cannot be done there. The coastal state may prohibit warships under certain circumstances, but what happens if the flag state does not recognize that territorial sea claims of the coastal state? On the other hand, the contiguous zone is carefully structured, but it only works if the coastal state's territorial sea is 12 miles or less. The High Seas Treaty is

rather specific as to definition and conduct, but where does it begin? Similar, important questions may be asked about the Continental Shelf Treaty and definitions of "exploitable depths," etc.

These treaties were fairly broad in scope and occasionally specific in nature, but more generally may be viewed as superficial. They preferred the 'broad brush' treatment, leaving out or ignoring those details not susceptible to agreement by the signatories. Because of these omissions, these treaties tend to be only marginally effective as arms restraints measures or models for future considerations. They show better what not to do, than provide a guide for subsequent agreements.

The notions of nuclear-free or denuclearized zones, including oceans as well as land, gained in popularity and were pursued for several years. Although the African Resolution was initially a reaction to the French land tests, it did include the "territorial seas" of the African states. These were not further defined, nor were the prohibitions from these waters adequately delineated. The Latin American nuclear-free zone, on the other hand, was most explicit as to the geographical waters included, with latitude and longitude specified on a map. Its territorial imperatives were so great that they included much water surrounding islands and lands belonging to states not desirous of being restrained by such a Treaty. Because of the Panama Canal Zone and Puerto Rico, for example, the United States did not sign that accord. This Zone included air space and, if adhered to, prevents planes and ships from

navigating through great portions of the southern Western Hemisphere. The specificity of the Latin American Zone is not repeated in the Indian Ocean Zone of Peace proposal; it merely states it has "limits to be determined." It also does not acknowledge that nuclear powers may not desire to exclude from their territories physically within the region, all future possible nuclear weapons, whether for transit, storage, or stock piling.

The Baltic Continental Shelf declaration seems to treat that area as a sort of 'private sea' to be used for peaceful purposes only, whatever that may mean.

The Seabed Arms Control Treaty is more definitive in its prohibitions than some of the other accords, but still uses the loose wording of the High Seas Treaty to describe its area of impact. It does not reduce any weapons systems--it merely prohibits their possible use in an area in which (so far) there has not been much interest, anyway.

The strategic arms limitation Interim Agreement differs dramatically from most prior Agreements in that it is very narrow in scope, is very tightly drawn, and covers a short period of time. It limits ships and launchers by numbers and by type, using national means of verification. The Chicken-of-the-Sea accord, another signed at the summit meeting, merely codifies some generally accepted rules of the road in international law.

The general and complete disarmament proposals generated primarily at the continuing Geneva conferences, are world-wide

in application but very specific as to weapons systems and types. They are defined by function, mission, dimension, and weight. These also include strict personnel controls of military and civilian personnel comprising a state's armed forces. They do not seem to have drawn much sustained interest over the years and may be set forth for propaganda reasons only. Other, more geographically modest, proposals have induced a bit more concern, but usually within those areas affected (central Europe, the Mediterranean, Scandinavia, and the Middle East, the Bering Straits). Other proposals have tried to get at arms restraints through budgetary reductions or limitations on delivery vehicles, without much response.

The grand schemes of the post-World War I era seem to have been traded in for more geographically specific and technically modest proposals, some successfully achieved; some not. Still, the political will of the participants is uppermost, with states willingly giving up what they do not have and are not interested in obtaining, while refusing to limit those items which they desire to increase. Fewer treaties and other accords have been made in the maritime field of arms controls since World War II; but by the same token, fewer have been violated and there has not been a global conflict for almost 30 years. Perhaps from this perspective, then, these accords have merit and have proved themselves generally beneficial to the world, but they still say little for the many small wars which have taken place in the same time frame.

As in the previous chapter, the post-World War II review

finds the forces militating against arms restraints the same, although the weapons systems and the participants have changed somewhat. Political will, the perceptions of threat and international stability, the economic pressures, and the representatives all affect the efforts surrounding arms control negotiations. An examination of arms control attempts in areas indirectly related to the maritime arena (next chapter) will show similar responses. Costs of extensive armaments encourage nations to seek controls of some sort, but international instabilities and the divergent desires of individual participants dilute or wash out these accords. Agreements frequently are made too explicit or complicated to be enforced or are made too general to be worthwhile. The patterns of maritime arms control have been altered somewhat by time and circumstances, but they have not been changed radically in this century.

CHAPTER III

OTHER AGREEMENTS, ACCORDS, AND STATEMENTS SINCE WORLD WAR II THAT INDIRECTLY AFFECT THE MARITIME ARENA

Western publics, especially in England and the United States, tend to posit an anti-thesis between power and morality, between the soldier and civilization, between 'evil' expenditures for military defense and 'good' expenditures for economic development and welfare. ...The advent of nuclear, chemical and biological weapons,...has made general disarmament appear to many a more desirable goal than ever before in history.¹

The various documents briefly examined here are not directly related to maritime arms control efforts because they do not pertain to or attempt to limit, reduce, or otherwise constrain naval armaments or their uses. Rather, these related matters touch on the realm of the oceans and/or their use, or contribute concepts which might be transferred to the maritime atmosphere in some aspect. The examinations are cursory and merely provide the flavor of the situation.

The Truman Proclamations of 1945

In the latter part of September 1945, President Truman made several decisions that were to affect greatly the uses of the oceans three decades later. By Proclamation, the President established a United States policy concerning off-shore natural

¹James E. Dougherty, How to Think about Arms Control and Disarmament, National Strategy Information Center, Crane, Russak and Company, New York, 1973, p. 6.

resources.² The reasons were several: because of a "world-wide need for new sources of petroleum and other minerals..."; because "such resources underlie many parts of the continental shelf..."; because "recognized jurisdiction over these resources is required in the interests of their conservation and prudent utilization..."; and because the "continental shelf may be regarded as an extension of the land-mass of the coastal nation to and thus naturally appurtenant to it...." For these reasons, President Truman declared that

The Government of the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control. ...The character as high seas of the waters above the continental shelf and the right to their free and unimpeded navigation are in no way thus affected.

A press release accompanying the Proclamation indicated that the "submerged land which is contiguous to the continent and which is covered by no more than 100 fathoms (600 feet) of water is considered as the continental shelf."³ It was felt that perhaps "oil deposits extend beyond this traditional /three miles/ limit of national jurisdiction." The President

²Proclamation 2667--Policy of the United States with Respect to the Natural Resources of the Subsoil and the Sea Bed of the Continental Shelf," Federal Register, Vol. 10, No. 193, October 2, 1945, p. 12303. The Proclamation is dated September 28, 1945. Unless otherwise indicated, all references are to this source.

³National Archives and Records Service, General Services Administration, Public Papers of the Presidents of the United States--Harry S. Truman 1945, U.S. Government Printing Office, Washington, D.C., 1961, pp. 353-354.

expressly eschewed any abridgement of the right of free and unimpeded ship passage, nor did he extend the territorial sea limits. He merely wanted to "make possible orderly development of these resources."

That same day, the President also proclaimed the right

to establish conservation zones in those areas of the high seas contiguous to the coasts of the United States wherein fishing activities have been or may be developed and maintained on a substantial scale.... The character as high seas of the areas in which such conservation zones are established and the right to their free and unimpeded navigation are in no way thus affected.⁴

In both of these proclamations, President Truman stipulated that neither of these policies would change, affect, or modify the "character as high seas of the area" concerned. In fact, that is not true because the rush to territorial seas in excess of three miles commenced after 1945 and is based in large measure on the Truman Proclamation of that year. The more recent extension of "areas of jurisdiction," "economic zones of sovereignty," "patrimonial seas," and other "limited jurisdiction" areas has become an integral part of the continuing diplomatic conversation concerning the oceans and their uses

⁴"Proclamation 2668--Policy of the United States With Respect to Coastal Fisheries in Certain Areas of the High Seas," Federal Register, Vol. 10, No. 193, October 2, 1945, p. 12304. The Proclamation is dated September 28, 1945. Unless otherwise indicated, all references are to this source.

and resources.⁵

Although he expressly stated that the high seas were not affected by these policies, President Truman must have anticipated at least some possible problems because he directed that the fishery conservation zones be established by the Secretary of the Interior and the Secretary of State.⁶ It seems evident that the United States policies would, in truth, intrude into an area previously considered as being governed by international law and not subject to unilateral national usurpation. At any rate, if President Truman had some anticipation of future complications arising from his decisions, he was justified in his apprehensions. Unilateral action or

⁵Louis Henkin, "Changing Law for the Changing Seas," in Edmund A. Gullion, editor, Uses of the Seas, Prentice-Hall, Incorporated, Englewood Cliffs, New Jersey, 1968, pp. 69-97, esp. pp. 72-76. See also Wolfgang Friedman, "The Law of the Sea: Past, Present and Future," in John W. Logue, editor, The Fate of the Oceans, World Order Research Institute, Villanova University Press, Villanova, Pennsylvania, 1972, pp. 100-135; in which he states, "(T)he seas have not, until recently been the property of or under the exclusive jurisdiction of any state.... The great achievement of the early seventeenth century, one seemingly secure for the last few centuries, was to gain acceptance of the doctrine that the sea is nobody's property. This meant that ships could sail all over the seas, and fisherman could fish all over the seas.... But a new era has started. We can date it, I think, very close to the famous Truman Proclamation of 1945 which proclaimed the exclusive sovereignty of the United States over the resources of the seabed of the so-called continental shelf. In a parallel statement the continental shelf was defined as the seabed out to a depth of roughly two hundred meters. Yes, the Truman Proclamation started a revolution. For in its wake there came a flood of national claims to exclusive navigation and fishery rights and finally to full sovereignty over wide areas of the seas.", p. 101.

⁶"Executive Order 9634--Providing for the Establishment of Fishery Conservation Zones," Federal Register, Vol. 10, No. 193, October 2, 1945, pp. 12305. The Order is dated 28 September 1945.

"creeping jurisdiction" is the essence of the problem in the current United Nations Law of the Sea Conference which will be examined shortly.

Atomic Energy Control Attempts

The Soviet Union presented a draft convention in 1946 for eliminating "the production and employment of weapons based on the use of atomic energy...."⁷ This very simple proposal called for the prohibition of the use of atomic weapons, prohibition of the production or storing of these weapons, and the destruction of all existing weapons (not further defined) within three months (Article 1). The approach of the United States differed in that she preferred the international control of atomic energy. The United Nations, through its International Atomic Development Authority, would have "managerial control or ownership of all atomic energy activities potentially dangerous to world security" and the power to control, inspect and license all other atomic activities.⁸ After the

⁷"Draft International Convention to Prohibit the Production and Employment of Weapons Based on the Use of Atomic Energy for the Purpose of Mass Destruction: Proposal by the U.S.S.R., June 19, 1946," in U.S. Congress, Senate, Committee on Foreign Relations, Disarmament and Security--A Collection of Documents 1919-1955, 84th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., 1956, pp. 225-226. Unless otherwise indicated, all references are to this source.

⁸"United States Proposals for the International Control of Atomic Energy: Statement of the United States Representative (Baruch) to the United Nations Atomic Energy Commission, June 14, 1946," in U.S. Congress, Senate, Committee on Foreign Relations, Disarmament and Security--A Collection of Documents 1919-1955, pp. 189-196, esp. p. 191. Unless otherwise indicated, all references are to this source.

implementation of control by this international authority, the United States then proposed to stop the manufacture of bombs and the disposal of existing stockpiles of weapons. Neither effort produced any substantive results and the two merely continued presenting mutually unacceptable proposals. The first treaty of indirect importance came more than ten years after initial attempts were made to control atomic energy weapons.

The Antarctic Treaty of 1959

The Antarctic Treaty was signed in late 1959 by twelve nations, including the four nuclear powers. The signatories desired that "Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord...."⁹ Although the Treaty does allow the use of military personnel and equipment for "scientific research or for any other peaceful purpose" they may not be used to establish any military bases or fortifications, or to conduct maneuvers or weapons tests (Article 1). The emphasis in the Treaty is on freedom of scientific research in the Antarctic and exchange of information developed through these efforts. Nuclear explosions and the disposal of radioactive wastes are specifically prohibited and the geographic area is carefully drawn ("the area south of 60° South Latitude") (Articles 5 and 6). The remainder of the

⁹"The Antarctic Treaty," in Department of State, United States Treaties--Treaties and Other International Acts Series 4771-4834, U.S. Government Printing Office, Washington, D.C., 1961, TIAS 4780. Unless otherwise indicated, all references are to this source.

Treaty discusses reporting procedures for exchange of information, settlement of disputes, and housekeeping functions. Of import are the geographic limits--carefully defined,--the total ban on nuclear devices of any sort in the area, and the complete denial of "any measures of a military nature" within the 60° South Latitude area, except that

nothing in the present Treaty shall prejudice or in any way affect the rights, or the exercise of the rights, of any State under international law with regard to the high seas within that area. (Article 6)

The talks leading to this treaty were started in early 1958 at the urging of the United States¹⁰ to settle potential disputes and allay fears of future military activity in the area.¹¹ From the time the Soviet Union's expeditions had been active in the area after World War II, several countries closest to the Antarctic expressed worries about the use of the area for potential missile sites. This, coupled with the fact that the Antarctic is the "breeding ground for much of their weather" patterns and therefore a potential hazard for

¹⁰Walter Sullivan, "12 Countries Vow to Bar Warfare from Antarctica," The New York Times, October 16, 1959, pp. 1, 3.

¹¹Philip L. Jessup and Howard J. Taubenfeld, Controls for Outer Space and the Antarctic Analogy, Columbia University Press, New York, 1959, "Part II: International Controls for the Antarctic," pp. 137-190. In 1952, the Argentine Navy actually fired on the Royal Navy due to territorial disputes in the Antarctic, see p. 149. However in another article, "Antarctic Pact Grew from I.G.Y.," The New York Times, December 2, 1959, p. 47, states that the Argentines and British fired shots as early as 1948.

fallout, made a treaty very attractive to several nations.¹² Although the Treaty is simple in language and limited but definite in its prohibitions, it still gives way to the freedom of the seas concepts and, therefore, is not absolute in its authority. It is, however, an example of geographic limits and military systems exclusions. A subsequent treaty approached the arms control problem from a different perspective, preferring to prohibit and limit nuclear testing rather than weapons systems.

The 1963 Partial Nuclear Test Ban Treaty

The Partial Test Ban Treaty¹³ was considered by many as the first major east-west accord since the signing of the Austrian State Treaty in 1955 and came after more than five years of negotiations.¹⁴ The original parties to the Treaty

¹²Especially Australia, New Zealand, Chile, Argentina and South Africa, all of whom signed the Treaty. See also, "Antarctic Pact Grew from I.G.Y.," The New York Times, p. 47. An earlier (1948) U.S. proposal for an international solution to the Antarctic problem of conflicting claims was shelved after the U.S.S.R. objected because she had not been initially consulted in the negotiating process.

¹³"Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water," in Department of State, United States Treaties and Other International Agreements, Vol. 14, Part 2, 1963, TIAS 5433, U.S. Government Printing Office, Washington, D.C., 1964, pp. 1313-1387, herein after referred to as the "Partial Nuclear Test Ban Treaty," TIAS 5433. Unless otherwise indicated all references are to this source.

¹⁴Seymour Topping, "U.S., Soviet and Britain Reach Atom Accord that Bars All But Underground Tests, in Major Step Toward Easing Tensions," The New York Times, July 26, 1963, pp. 1, 8. The Antarctic Treaty of 1959 was not considered an "east-west" agreement because the contentions did not run along those lines.

(the United States, Great Britain, and the Soviet Union) acknowledged as their "principal aim the speediest possible achievement of an agreement on general and complete disarmament under strict international control." To obtain this goal, the three of them, plus 101 subsequent signatories¹⁵ agreed

to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: in the atmosphere; beyond its limits including outer space; or underwater, including territorial waters or high seas or

in any other environment from which radioactive fallout might extend outside the testing state's territorial limits or jurisdiction (Article 1). The Treaty is of unlimited duration, open to others for signature, may be amended, and may be abrogated if "extraordinary events" "have jeopardized the supreme interests" of a participant (Articles 4.3, and 4). There are no references to verification or procedures to be used if a violation is suspected. And it does not cover underground nuclear weapons or devices testing through explosions.

Underground tests were not included because the Soviet Union would not "accept international on-site inspection to verify the nature of seismic disturbances."¹⁶ On the other

¹⁵There are 104 signatories at present. See: Department of State, Treaties in Force--A List of Treaties and Other International Agreements of the United States in Force January 1, 1974, U.S. Government Printing Office, Washington, D.C., 1974, p. 365. However, Dougherty, How to Think About Arms Control and Disarmament, says 120 states on p. 135.

¹⁶Topping, "U.S., Soviet and Britain Reach Atom Accord...", The New York Times, p. 1.

hand, the desire among the original parties "to limit membership in the 'club' of nuclear powers propelled" the three of them toward agreement on the partial test ban, despite Soviet desires for a tandem non-aggression pact between the North Atlantic Treaty Organization and the Warsaw Treaty Organization. The second Agreement was an attempt to gain recognition for the post-World War II status quo in Europe, especially Eastern Europe.¹⁷

This Partial Nuclear Test Ban Treaty has little direct effect on the problems of maritime arms controls and/or restraints because underwater nuclear tests have not been seriously contemplated and they are very easy to detect if used, thanks to the extreme sound propagation of water as a medium.¹⁸ It does not limit the use of nuclear weapons in defense of the United States or her Allies, according to the then Secretary of State, Dean Rusk.¹⁹ On balance, its effect seems to be more psychological and ecological than substantive from an arms restraint perspective, in that its main purpose was to stop the radioactive pollution of the atmosphere while merely making weapons tests more inconvenient and expensive. A subsequent treaty was more substantial in its effects on weapons systems.

¹⁷"Major Powers Wary of Spread of Atomic Weapons to Others," The New York Times, July 26, 1963, p. 9.

¹⁸John A. Osmundsen, "Risks Substantial for Any Violator," The New York Times, July 26, 1963.

¹⁹Dougherty, How to Think About Arms Control and Disarmament, pp. 134-135.

The Outer Space Treaty of 1967

Although actually signed in January of 1967, the Outer Space Treaty was unanimously approved by the United Nations General Assembly in the preceeding December,²⁰ having been negotiated within that organization. It is important here as an example of exclusionary measures in a geographic area because it prevents the placement in orbit of any objects carrying nuclear weapons; nor may these objects be placed on celestial bodies or otherwise stationed in space (Article 4).²¹ Other weapons of mass destruction are similarly excluded from outer space and celestial bodies. The Treaty is multilateral, emphasizing and encouraging peaceful scientific research and exchange of information, especially among and for astronauts. It does not prohibit or even restrict the use of space for military reconaissance missions for data collection or verification. This latter fact, of course, can have important ramifications for maritime matters because satellite data can indicate the locations of various surface ships from their construction to their daily deployment. Present technology may progress sufficiently to enable heat-sensitive photographic equipment to detect submerged submarines on cruise in the

²⁰Kathleen Teltsch, "Translation Woe Plagues U.N. Pact," The New York Times, January 15, 1967, p. 5.

²¹"Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies," in Department of State, United States Treaties and Other International Agreements, Vol. 18, Part 3, 1967, TIAS 6347, U.S. Government Printing Office, Washington, D.C., 1968, pp. 2410-2498, herein after referred to as the "Outer Space Treaty," TIAS 6347. Unless otherwise indicated all references are to this source.

future, but these activities are not discussed in this treaty.²²

Mutual Balanced Force Reductions--Or Mutual Reductions of Forces and Armaments and Associated Measures in Central Europe

What started out as the MBFR talks are now called the MURFAAMCE conversations. They are no longer balanced, but they are still force reduction talks. In the preliminary discussions in the Winter and Spring of 1973 between the North Atlantic Treaty Organization members and those of the Warsaw Treaty Organization, the status of Hungary was an initial stumbling block.²³ The NATO Allies desired to have Hungary included in the talks of arms reductions because of her central location. The Warsaw Pact members immediately responded by demanding the inclusion of Italy, primarily because part of the United States Sixth Fleet is home ported in Gaeta and Naples, thus including the fleet assets in possible talks.²⁴ This apparently forced the NATO negotiators to accept Hungary

²²See: Ted Greenwood, "Reconnaissance, Surveillance, and Arms Control," The International Institute for Strategic Studies, London, June 1972, Adelphi Paper No. 88, and Paul Cohen, "The Erosion of Surface Naval Power," Foreign Affairs, Vol. 49, No. 2, January 1971, in which, among other things, they discuss expanding technologies for surveillance such as satellites, p. 334.

²³Craig R. Whitney, "Formal Talks on Troop Reductions in Europe Open in Vienna," The New York Times, October 31, 1973, p. 12.

²⁴Discussion with a senior civilian in the Ministry of Defense, United Kingdom, London, Spring 1974.

in a "nondecisionmaking" status only,²⁵ because they did not want to include maritime functions, especially those of the Sixth Fleet, in these talks. The problems of the forward based systems, especially those carriers with nuclear-capable planes and ballistic missile submarines and their forward bases at Rota and Holy Loch, have been excluded successfully from various negotiations so far.²⁶

On the other hand, some sources indicate that the "Hungarian Connection" was not intimately linked with Italy and the inclusion of the Sixth Fleet in these force reductions talks, but rather that the NATO Allies preferred to keep the discussions focused on a small, more manageable, geographic area, namely Central Europe. If the Warsaw Pact members insisted on including such outlying NATO countries as Italy for Hungary, then the NATO negotiators would have to include such nations as Norway and Turkey, thus enlarging the scope beyond Central Europe and closer to the European Security Conference.

²⁵Dana A. Schmidt, "NATO Allies of U.S. Face Stern Talk," The Christian Science Monitor, November 7, 1973, p. 9. Other countries in a "nondecisionmaking" status at the meetings are: Rumania and Bulgaria; Italy, Norway, Denmark, Greece and Turkey.

²⁶See Robert L. Pfaltzgraff, Jr., "The United States and Europe: Partners in a Multipolar World?," Orbis, Vol. 17, No. 1, Spring 1973, p. 45, for comments on the FBS issue. See also, Andrew J. Pierre, "Can Europe's Security be 'Decoupled' from America," Foreign Affairs, Vol. 51, No. 4, July 1972, pp. 761-777; John Newhouse, "Stuck Fast," Foreign Affairs, Vol. 51, No. 2, January 1973, pp. 353-366; and Robert R. Bowie, "The Bargaining Aspects of Arms Control: The SALT Experience," in William R. Kintner and Robert L. Pfaltzgraff, Jr., editors, SALT--Implications for Arms Control in the 1970s, University of Pittsburgh Press, Pittsburgh, 1973, p. 131 for more discussions on forward based systems, their definitions and uses.

When NATO backed off from Hungary, the WTO dropped Italy.²⁷

As the talks progressed in the Fall of 1973, the focus continued to be on the Central European theater with both sides making substantive, if different, proposals. The Western negotiators proposed a ceiling of 700,000 troops for both sides, including stationed and indigenous personnel, while the Warsaw Pact Allies preferred a 15 percent reduction on each side in two stages.²⁸ The talks continued without such progress, recessing for much of the summer of 1974, and were scheduled to reopen in September of 1974.²⁹

The European Security Conference or the Conference on Security and Cooperation in Europe

Although the forces influencing the generation of such a conference were building for several years, the first formal meeting took place in Helsinki in November 1972 to discuss

²⁷ Discussion with a senior United States Navy officer in Brussels in Spring 1974.

²⁸ "West Called 'Not Helpful' In Talks on Troop Cuts," The New York Times, December 14, 1973, p. 3. Also, discussion with a senior civilian in the Ministry of Defense United Kingdom, London, Spring 1974.

²⁹ For a sample of the progress, see the following articles: Christopher S. Wren, "Soviet Says NATO Blocks Gains in Troop-Cut Parley," The New York Times, December 18, 1973, p. 3; "East Bloc Nations Again Bar West's Troop-Reduction Plan," The New York Times, January 18, 1974, p. 3; "MBFR Deadlock," editorial, The New York Times, February 6, 1974, p. 32; Leslie H. Gelb, "East and West Far Apart At Talks on Cuts in Force," The New York Times, February 8, 1974, p. 3; "Troop Talks in Vienna Inching Ahead," The New York Times, June 3, 1974, p. 4; and Eric Bourne, "NATO Ponders Nuclear Arms Cut Offer," The Christian Science Monitor, July 19, 1974, p. 2. The last article suggests that the NATO Allies may be willing to include some tactical nuclear weapons and aircraft as possible bargaining chips to induce forward movement in the talks.

agenda items and future location.³⁰ The main themes of this Conference, moved to Vienna, are:

- (1) security, including general principles for reducing military-related tensions in Europe and the Mediterranean as well as 'confidence building' measures; (2) human contacts..., and (3) economic concerns...³¹

The inclusion of the Mediterranean in these talks, of course, creates the distinct possibility that the Sixth Fleet, as well as littoral nations' naval assets, could become an agenda item.³² By the same token, whether or not the Mediterranean navies are discussed, there is no known stipulation prohibiting the general discussion of maritime arms controls or restraints at this Conference. That they will or even might be considered is another question entirely.

Although

the Western powers have correctly established a link between the political problems of the security conference and the reduction of armaments and armed forces

³⁰For an excellent history of the background leading to the CSCE, see: Mojmir Povelny, "The Soviet Union and the European Security Conference," Orbis, Vol. 18, No. 1, Spring 1974, pp. 201-230.

³¹"Reflections on the Quarter--The Conference on Security and Cooperation in Europe," Orbis, Vol. 17, No. 2, Spring 1973, pp. 304-308.

³²Dom Mintoff, of Malta, demanded and got from the Conference an agreement to hear from the southern Mediterranean (non-European) littoral states their views on security. In addition to Algeria, Tunisia, Egypt, and Syria, Israel, at the insistence of some Western European nations, also presented her views. See: "Reflections on the Quarter--Negotiating European Security," Orbis, Vol. 17, No. 3, Fall 1973, pp. 662-663.

in Europe,...they have been wrong about the order of business in wishing to settle arms cuts first. Once they conceded to the Soviets that there was a political issue for the CSCE to handle, they were trapped by the age-old maxim that political accommodation must come before any armaments regulation.³³

Perhaps the perceived lack of progress at the Conference³⁴ can be attributed to this theory that neither side will make the first concession. Others see little possibility of any substantive arms measures at the European security conference, not because neither side will make the first move, but rather because the large numbers of representatives (including neutrals) makes this type of discussion unproductive. Some speculation has arisen about 'confidence building' measures such as "observers at transportation points or pre-announcements of military exercises," but

except for broad statements supporting non-aggression, agreements limiting the size or use of military forces are unlikely³⁵

at the Conference on Security and Cooperation in Europe. If, in the unlikely event that arms restraints of any sort are

³³Povolny, "The Soviet Union and the European Security Conference," Orbis, p. 230.

³⁴See: C.L. Sulzberger, "Nothing Ado About Much," The New York Times, May 26, 1974, Sec. 4, p. 15; "Windup of European Conference on Security Is Now in Doubt," The New York Times, May 26, 1974, p. 10; and "East-West European Meetings Reported Stalled on All Issues," The New York Times, June 9, 1974, p. 6.

³⁵Barry Carter, "What Next in Arms Control?," Orbis, Vol. 17, No. 1, Spring 1973, p. 177.

discussed, the possibility that they will be of the maritime variety is even less probable, given the post-World War II emphasis of arms restraint measures on land forces rather than sea forces.³⁶ Recent reports indicate that the issues are the freedom of movement of peoples and ideas across borders versus the interference in internal politics, and that arms restraint measures are not being discussed.³⁷

The Strategic Arms Limitation Talks, 1973 and 1974

The maritime aspects of the first phase of the Strategic Arms Limitation Talks have been reviewed in Chapter II, but the more recent SALT agreements are worth noting also, as are the speculations prior to their announcement in June 1973 and

³⁶For more information on and discussions of the security conference in Europe see the following: Karl Kaiser, "Europe and America" A Critical Choice," Foreign Affairs, Vol. 52, No. 4, July 1974, pp. 725-741; "Reflections on the Quarter--U.S.-European Relations in an Era of Negotiations," Orbis, Vol. 16, No. 4, Winter 1974, pp. 841-844; W. Multan and A. Towpik, "Western Arms Control Policies in Europe Seen from the East," Survival, Vol. 16, No. 3, May/June 1974, pp. 127-132 (reprinted from Europa-Archiv, April 1974); Pfaltzgraff, "The United States and Europe: Partners....," Orbis, pp. 31-50; Wilfred L. Kohl and William Taubman, "American Policy Toward Europe: The Next Phase," Orbis, Vol. 17, No. 1, Spring 1973, pp. 51-74; and for the final recommendations of the Helsinki consultations see "Documentation--European Security," Survival, Vol. 15, No. 5, September/October 1973, pp. 236-240.

³⁷Paul Wohl, "Prospects Grow Dim for Europe Summit," The Christian Science Monitor, August 9, 1974, p. 4. See also: Stockholm International Peace Research Institute, World Armaments and Disarmament--SIPRI Yearbook 1973, Almqvist and Wiksell, Stockholm, 1973, which says in part, "The problem [of security in Europe] has been a difference in approach to the whole issue by the two military alliances; in their considerations of the question of security in Europe, NATO countries, with the exception of France, have generally given priority to the problems of reduction of forces; Warsaw Treaty countries have more strongly emphasized the need for discussing political and economic issues," p. 103.

October 1974.

Much discussion has appeared recently about the greater 'stability' of sea-based strategic systems due to their essential military invulnerability, greater flexibility of use, increased area coverage, and insulation from excessive political snipping. On the other hand

Their main disadvantage is their vulnerability to missiles launched from submerged, airborne or surface platforms. A lesser one is that war at sea, fought in isolation from any land battle, could become nuclear, while the battle ashore might not.³⁸

According to others, sea-based systems have greater "arms controllability" owing to their warning time and their lack of vulnerability to attack themselves. These facets have political as well as military usefulness.³⁹ In addition to the submarine launched ballistic missiles, one may consider as forward-based systems some Western land, sea, and air assets because they can reach the Soviet Union with some theater

³⁸Stephen T. De La Mater, "The Role of the Carrier in the Control of the Seas," Naval Review 1972, U.S. Naval Institute Proceedings, Vol. 98, No. 831, May 1972, p. 114. For a broader picture of the advantages and pitfalls of a SALT II agreement, see: Walter C. Clemens, Jr., "SALT II: Can it Succeed?," The Christian Science Monitor, October 5, 1973, p. 20.

³⁹Kintner and Pfaltzgraff, editors, SALT--Implications for Arms Control in the 1970s, p. 116.

nuclear weapons and airplanes armed with nuclear weapons.⁴⁰

Without getting into the discussion of what constitutes a forward-based system, especially those pertaining to the Navy, one may examine some of the thoughts on recent SALT possibilities as they related to the maritime mode of arms controls, restraints, or reductions. Since the United States has been viewed as having the advantage over the Soviet Union in anti-submarine warfare techniques and capabilities,⁴¹ some authors think an agreement might include geographic restrictions on nuclear powered attack submarines, monitored by sonar barriers, or limits on the numbers of these hunter-killer submarines.⁴² Besides these proposals, others advocate the prohibition of continuous tracking of ballistic missile submarines by other submarines or surface ships.⁴³ Yet a different writer states

⁴⁰For some excellent commentary on this subject, see: Bowie, "The Bargaining Aspects of Arms Control: The SALT Experience," in Kintner and Pfaltzgraff, editors, SALT--Implications for Arms Control..., pp. 131-133; Pierre, "Can Europe's Security be 'Decoupled' from America," Foreign Affairs, p. 766, in which he states that the Soviet Union defines strategic forces as all those capable of reaching the homeland of the other. Thus, some aircraft in Europe and aboard Sixth Fleet carriers are considered strategic FBS; Alton H. Quanbeck and Barry M. Blechman, Strategic Forces: Issues for the Mid-Seventies, The Brookings Institution, Washington, 1973, p. 17; Pfaltzgraff, "The United States and Europe: Partners in a Multipolar World?," Orbis, p. 45.

⁴¹Jerome H. Kahan, "Limited Agreements and Long-Term Stability: A Positive View Toward SALT," Stanford Journal of International Studies, Vol. 7, Spring 1972, p. 73; Walter C. Clemens, Jr., "SALT II--Who's Got What?," The Christian Science Monitor, October 2, 1973, p. 12.

⁴²Kahan, "Limited Agreements and Long Term Stability...", p. 79.

⁴³Herbert Scoville, Jr., "Beyond SALT One," Foreign Affairs, Vol. 50, No. 3, April 1972, pp. 492-493.

that

SALT's second phase, however, will touch issues closer to home, notably America's forward-based nuclear-capable aircraft on which West Europeans rely to offset Soviet missiles targeted on their cities.⁴⁴

On a slightly different course, another author preferred to prohibit the deployment of "ocean systems that could have an ASW capability." He would prohibit sonar arrays in oceans and maintain geographic areas free of military systems all together, while other areas would be acknowledged as being under the uncontested control of one or another major power.⁴⁵ The concept of certain geographic sanctuaries is seen in the notion of "safe passage for missile-launching submarines along designated routes to the open ocean" from their bases. No definition of open ocean is provided, but this writer does distinguish between the inviolability of SLBM boats and "the active conduct of a tactical, nonnuclear and antisubmarine war."⁴⁶ In other words, he maintains that technology and agreements can be developed to differentiate between strategic (or

⁴⁴John Newhouse, "Stuck Fast," Foreign Affairs, Vol. 51, No. 2, January 1973, p. 355. Pierre, in "Can Europe's Security be 'Decoupled' from America," calls for a trade-off of these two--the U.S. FBS for the medium and intermediate range ballistic missiles targeted on Western Europe by the U.S.S.R., p. 767. See also: Leslie H. Gelb, "Jackson Sees U.S.-Soviet Arms' Impasse," The New York Times, December 5, 1973, p. 4.

⁴⁵Bernard T. Feld, "ASW--the ABM of the 1970's?," Stanford Journal of International Studies, Vol. 7, Spring 1972, p. 94.

⁴⁶Richard L. Garwin, "Antisubmarine Warfare and National Security," Scientific American, Vol. 227, July 1972, p. 15.

nuclear) ASW and its uses and tactical (or nonnuclear) ASW and its uses, by such measures as: no active tracking of missile submarines; ocean sanctuaries for these boats; the safe conduct routes mentioned, especially during a conventional war; and the carrying of a buoy by the SLBM boats which emits a signal indicating that they are SLBMs and that therefore, in a conventional war, they receive safe conduct rights.⁴⁷ Another set of writers has expressed great interest in a future SALT agreement centering around the limits of sea-based cruise missiles, either on their own or as a trade-off with land-based bombers or missiles targeted in Europe.⁴⁸

There are, of course, other aspects of the SALT agreements besides those affecting the sea-based portions of the United States and Soviet defense structures, such as the increased accuracy of missiles (both sea- and land-based), the modification of nuclear targeting strategy from counter-value to include counter-force targets, the budgetary constraints impinging on both sides, and the technological developments including 'pop-up' missiles and maneuverable re-entry vehicles. But these are indirectly related to the maritime problems and,

⁴⁷Garwin, "Antisubmarine Warfare...", p. 25.

⁴⁸Quanbeck and Blechman, "Strategic Forces...", Brookings, p. 17; and Carter, "What Next in Arms Control?," Orbis, p. 179.

therefore, are mentioned although not discussed in here.⁴⁹

The most recent Strategic Arms Limitation Talks of November 1974 produced an "agreement to agree" on a future written accord covering the limitation of strategic offensive weapons.⁵⁰ The written agreement between the Soviet Union and the United States does not specify the limits on strategic arms; rather it states that,

Both sides will be entitled to have a certain agreed aggregate number of I.C.B.M.'s and S.L.B.M.'s equipped with independently targetable warheads (M.I.R.V.'s).⁵¹

Since the first announcement of the SALT II agreement, subsequent reports have indicated each side may have new permitted

⁴⁹For some greater explanations see: Leslie H. Gelb, "There Are Some Dangerous Curves on the Road to an Accommodation," The New York Times, December 9, 1973, Section 4, p. 3; Leslie H. Gelb, "Arms Parley Splits Nixon Administration," The New York Times, December 9, 1973, p. 3; "Cut in U.S. and Soviet Arsenals Urged in Moscow," The New York Times, December 20, 1973, p. 6; "SALT Bog....," The New York Times, January 7, 1974, p. 30; Charles W. Yost, "Up the Arms Escalator," The Christian Science Monitor, January 10, 1974, p. 12; Leslie H. Gelb, "Arms Talks Resume Feb. 19; U.S. Officials Split on Posture," The New York Times, February 6, 1974, p. 1; "The Round of Arms Talks," The Washington Post, February 22, 1974, p. 22; John W. Finney, "U.S. Won't Insist on Numerical Parity in Arms Talks with Soviet," The New York Times, March 4, 1974, p. 14; Leslie H. Gelb, "'New Ideas' May Help Get SALT Moving," The New York Times, March 24, 1974, Section 4, p. 3; and J. Snouck-Hurgronje, "Superpower Naval Rivalry," The Christian Science Monitor, June 14, 1974, p. F8; Flora Lewis, "Kissinger Looks to Public Debate on Moscow Ties," The New York Times, July 7, 1974, pp. 1, 12; Leslie H. Gelb, "Summit Talks Foundered on MIRV," The New York Times, July 9, 1974, pp. 1, 6; and Charles W. Yost, "The Arms Race After the Summit," The Christian Science Monitor, July 18, 1974, p. 16.

⁵⁰See "Text of the Nuclear Arms Agreement," The New York Times, November 25, 1974, p. 14.

⁵¹Provision 3 in, "Text of the Nuclear Arms Agreement," p. 14.

levels of 2400 delivery vehicles, of which 1320 may be equipped with multiple independently targeted re-entry vehicles (MIRVs).⁵² This may have great import for maritime arms control efforts because the SALT II Agreement includes, for each side, "essentially the freedom to mix" its land- and sea-based and bomber-delivered weapons.⁵³ This could mean for either or both parties an increase in the number of SLBM submarines and/or an increase in their launching capacity. That increase could easily precipitate increased anti-submarine efforts in the form of more ASW planes, surface ships, submarines, and detection equipment. Thus the SALT II Agreement may, in fact, increase the arms building in certain aspects of the maritime arena, rather than restrain or decrease

⁵²"Spurring the Arms Race," The New York Times, December 4, 1974, p. 42.

⁵³John Herbers, "Ford, Brezhnev Agree to Curb Offensive Nuclear Weapons; Final Pact Would Run to 1985," The New York Times, November 25, 1974, p. 14.

these efforts.⁵⁴ It is too early to determine exactly what steps either state may take in the future.

⁵⁴For a more complete discussion of the SALT II negotiation and its implications see also: Godfrey Sperling, Jr., "Ford-Brezhnev 'breakthrough'--New Yope for Arms Talks," The Christian Science Monitor, November 25, 1974, pp. 1, 4; Dana A. Schmidt, "Ford Adds Bombers to SALT Mix," The Christian Science Monitor, November 25, 1974, pp. 1, 6; Hedrick Smith, "A Gain Toward Detente," The New York Times, November 25, 1974, pp. 1, 14; "Text of the Ford-Brezhnev Communique," The New York Times, November 25, 1974, p. 14; Bernard Gwertzman, "A-Arms Accord Puts Limits at Below 2,500 Vechicles," The New York Times, November 26, 1974, pp. 1, 6; Guy Halverson, "U.S.-Soviet Arms Pact Debated," The Christian Science Monitor, November 29, 1974, p. 3; Hella Pick, "Caution on Arms 'Breakthrough'," The Manchester Guardian Weekly, November 30, 1974, p. 6; "U.S.-Soviet Agreement to Agree," The Manchester Guardian Weekly, November 30, 1974, p. 1; Simon Winchester, "Tactics of Fear," The Manchester Guardian Weekly, November 30, 1974, p. 8; "The Arms Pact Reduces Neither Terror Nor Costs," The New York Times, December 1, 1974, Section 4, p. 1; "SALT Questions Remain," The Christian Science Monitor, December 4, 1974, p. 12; Bernard Gwertzman, "Kissinger, After Senate Briefing, Calls Criticism of Arms Accord Surprising," The New York Times, December 5, 1974, p. 3; John W. Finney, "Pentagon Chief Sees Pact Leading to Arms Build-Up," The New York Times, December 7, 1974, pp. 1, 13; Bernard Gwertzman, "Kissinger Warns Arm Pact Foes Imperil Detente," The New York Times, December 8, 1974, pp. 1, 10; Guy Halverson, "More Air-Sea Mobility for U.S. Nuclear Force," The Christian Science Monitor, December 9, 1974, pp. 1, 8; Bernard Gwertzman, "U.S.-Soviet Arms Memo is Unresolved," The New York Times, December 10, 1974, p. 12; Herbert Scoville, Jr., "Two Positions: Moving Backward on Arms Curbs, Forward with Energy," The New York Times, December 12, 1974, p. 47; Victor Zorza, "Why Vladivostok Pack May Be Best Possible," The Christian Science Monitor, December 12, 1974, p. 1; David Fairhall, "Calculating Modern Nuclear Maths," The Manchester Guardian Weekly, December 14, 1974, p. 15; Victor Zorza, "MIRV Hawks Shot Down in Flight," The Manchester Guardian Weekly, December 21, 1974, p. 9; Drew Middleton, "Vast A-Arms Gain by Russians Seen," The New York Times, January 12, 1975, p. 17; Leslie H. Gelb, "Ford Briefs Team for A-Arms Pact," The New York Times, January 30, 1975, p. 6; James F. Clarity, "Soviet Says A-Curb Would Aid U.S. Ties," The New York Times, February 5, 1975, p. 13; John W. Finney, "Missile Build-Up Planned by U.S.," The New York Times, February 12, 1975, p. 5; Michael Getler, "Soviet Arms Restraint Urged," The Washington Post, February 12, 1975, pp. A1, A10; and Richard Burt, "Verification: Crux of SALT Accord," The Christian Science Monitor, February 13, 1975, p. 2.

The Law of the Sea Conference

Originally scheduled for the summer of 1973, the United Nations Law of the Sea Conference finally met in full session in June 1974 at Caracas, Venezuela.⁵⁵ With initial meetings at Geneva to establish administrative procedures, examine background material, and prepare draft treaty articles⁵⁶ in 1971, a final preliminary gathering convened in New York at the end of last year to clarify the problems surrounding territorial seas, economic zones, living resources, freedom of the seas, and other political and economic pressures.⁵⁷ The "common heritage of mankind," the term used by the United Nations resolutions to describe the riches of the seas, began losing ground in the various meetings to the more material interests of the individual states, including the United

⁵⁵David Binder, "12-Mile Sea Limit May Be Set in '74," The New York Times, December 1, 1973, p. 5.

⁵⁶General Assembly, United Nations, Report of the Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction, General Assembly Official Records Twenty-Sixth Session, Supplement No. 21 (A/8421), United Nations, New York, 1971, pp. 4-5.

⁵⁷Kathleen Teltsch, "148 Nations Joining U.N. Parley on Law of Sea Opening Today," The New York Times, December 3, 1973, p. 10. See also: Kathleen Teltsch, "Third U.N. Parley on Sea Law Opens," The New York Times, December 4, 1973, p. 6; "Sea Conference in Brief," The New York Times, December 4, 1973, p. 7; David Winder, "Protecting Neptune's Domain: UN Challenge," The Christian Science Monitor, December 4, 1973, pp. 1, 10.

States.⁵⁸

Of particular importance to this discussion are certain aspects of the Conference, especially the width of the territorial sea as it affects the use of international straits, freedom of transit, coastal states rights in any "economic zones" determined beyond territorial seas, and the restrictions of any international regime set up to oversee the harvesting of the deep ocean resources.⁵⁹ Some other observers see any restriction of the high seas freedom of maneuver or the contribution by the developed nations through the international seabed regime--"a kind of worldwide welfare system"--as being both unnecessary and dangerous to national security and unlikely to benefit anybody. In other words, no agreement is better than any agreement.⁶⁰

The width of the economic zone, which may go to 200 miles, is not so important as the restrictions on foreign ships, both

⁵⁸The best brief commentaries on the background of this conference are: John R. Stevenson and Bernard H. Oxman, "The Preparations for the Law of the Sea Conference," reprinted from The American Journal of International Law, Vol. 68, No. 1, January 1974, 32 pages; Evan Luard, "Who Gets What on the Seabed?," Foreign Policy, No. 9, Winter 1972-73, pp. 132-147; and Ann L. Hollick, "Seabeds Make Strange Politics," Foreign Policy, No. 9, Winter 1972-73, pp. 148-170. See also: "Whose Heritage," The New York Times, December 30, 1973, Section 4, p. 10, and Evan Luard, "Who Owns the Bottom of the Ocean?," The Sunday Times (London), June 16, 1974, p. 16.

⁵⁹Richard N. Gardner, "It is Time to Consider the Fish's Point of View," The New York Times, December 30, 1973, Section 4, p. 7.

⁶⁰Robert D. Heinl, Jr., "Sea Sovereignty in Danger," Navy Times, July 3, 1974, p. 13, and "Rich and Poor at Seabed Parley Debate Way to Exploit Minerals," The New York Times, July 2, 1974, p. 8.

civilian and governmental, transiting these zones.⁶¹ The freedom of navigation issue, for example, could affect nuclear powered aircraft carriers, surface ships, and submarines, and nuclear weapons-equipped ships and their freedom of movement if a state or states declared that pollution of their economic zones included 'nuclear pollution'. This same argument might appear if the international seabed regime were created to include these types of restrictions (or exclusions) within their areas of jurisdictions.⁶² The acceptance of the 200 mile economic zone by the United States (and Great Britain and the Soviet Union) is dependent upon the freedom of transit within these zones and a 12 mile territorial sea limit being accepted by the other nations at the Law of the Sea Conference. The 12 mile territorial sea would also include freedom of passage through the international straits of the world--no restrictions on civilian, naval, or other governmental ships by unreasonable pollution controls or other administrative procedures designed to give those states' territorial seas through which straits cut exclusionary or selective control over ships desiring to transit the straits.⁶³

⁶¹Ken O. Botwright, "200-mile Fish Zone Expected with or without UN Accord," Boston Sunday Globe, July 14, 1974, p. 18.

⁶²Victor Zorza, "Scramble for Riches of Seas is Under Way," The Christian Science Monitor, July 16, 1974, p. 5.

⁶³"The Riches of the Sea," The New York Times, July 21, 1974, Section 4, p. 14; Evan Luard, "Protecting the Economy of 200 Miles of Ocean," The New York Times, August 4, 1974, Section 4, p. 5; Robert R. Bowie, "Managing the Oceans," The Christian Science Monitor, August 7, 1974, p. 14; and James N. Goodsell, "Disputes Slow Pact on Seas' Resources," The Christian Science Monitor, August 15, 1974, p. 9.

The Law of the Sea Conference, then, has potential impact on maritime arms control considerations in three particular areas. Restrictions of freedom of navigation in a 200 (or other) mile economic zone would curtail the maneuverability of naval and other maritime forces throughout the world. Secondly, a 12 mile territorial sea that granted any sort of restrictive measures to the coastal states bordering on the worlds' international straits would severely curtail the navies of the world and perhaps entail an alteration of strategic plans and alliance guarantees. The third potential impact centers around the authority and scope of any international regime created to monitor, administer, or control the exploitation of the seas' resources "for the benefit of all mankind." The authority of this regime, including its degree of control of navigation within vast areas of the high seas, would be of utmost importance to the navies of the world.

Summary

As indicated at the beginning of this chapter, the treaties, conferences, talks, and accords discussed here are examined briefly and then only as they do or might affect the aspects of maritime arms controls.

Almost immediately after World War II, President Truman drew attention to the future importance of the oceans' economic value by issuing his proclamations. On behalf of the United States he claimed portions of the continental shelf in order to exploit the natural resources in that area. His claim went to approximately 100 fathoms depth and was intended to include

off-shore oil deposits. The second of the two Presidential proclamations dealt with the extension of fishing conservation zones as necessary to protect the living resources off the coast of the United States. Both of these innovations have been appropriated for use by other coastal states and thus provide much discussion material at the Law of the Sea Conference. Decisions on the constitution of these areas may materially affect the freedom of the high seas and the maneuverability of the ships of the worlds' navies.

Much of the rest of the late 1940s and early 1950s was spent, in the arms control arena, in trying to control the development and use of atomic devices especially as they were used in weapons systems. The Soviet Union preferred to destroy all existing stockpiles of bombs (in as much as she had few to destroy) and then implement an international organization to oversee the future production and use of these products. The United States, on the other hand, advocated the complete control of all aspects of atomic endeavors (except for actual mining) by the international regime first and then the reduction and eventual demolition of atomic weapons. The problems of inspection and verification were always bones of contention between the two powers and equalled in difficulty of solution the opposing approaches to the control of atomic energy. Many proposals were made in various United Nations forums over the years, but no controls were ever instituted and each continued what amounted to monologues for public consumption on the subject. It is apparent that the propaganda value of these proposals far outweighed any arms control value

they might have.

The latter part of the decade of the 1950s saw the signing of the Antarctic Treaty, which declared that the area described in the treaty would "be used exclusively for peaceful purposes." It prohibited all atomic weapons and atomic wastes, emphasizing, rather, the use of the area for scientific research and exchange of information. Part of the geographic area described in the treaty included open water and another article said that the treaty wording did not contravene any of the traditional freedoms of the high seas. This loophole is not particularly important in the Antarctic Treaty, but it does illustrate the problems of juxtaposing an exclusionary geographic treaty with an international tradition or concept, such as freedom of the high seas. The diminution of the strength of the Treaty could become very important if the geographic area were transferred to oceans more heavily travelled by the navies and other maritime interests of the world. Loopholes in treaties covering geographic areas where nuclear weapons could or would be used or tested frequently almost assuredly make these loopholes more important than the remainder of the treaty, and may actually make the treaty more harmful than beneficial.

The Partial Nuclear Test Ban Treaty, signed in 1963, banned all nuclear device testing in the atmosphere, outer space, and under water for the signatories. Those who did not sign are not bound by the treaty--this may have strong implications for future maritime arms control considerations. Only

those states which: (a) have no interest in doing what is to be prohibited; or (b) have already done it, will be willing to forego future rights to pursue that particular endeavor. Additionally, this treaty may indicate by what it does not prohibit, the types of maritime arms controls one might expect--ones that do not tread on tender or controversial diplomatic territory.

The 1967 Outer Space Treaty is another example of states agreeing not to do those deeds which they were not planning to do anyway. It prohibits the emplacement of weapons of mass destruction in outer space but does not exclude military reconnaissance from space. Military reconnaissance may prove of great importance in future maritime considerations, particularly for detection, tracking, and verification of ships on the high seas, both surface and sub-surface.

The two multilateral conferences in Europe both concern various aspects of security in that area, but neither the force reductions talks nor the central European security talks are discussing any aspects of naval or maritime considerations. Although each conference has eschewed these subjects for different reasons the net result is the same. Maritime forces continue to be excluded from these discussions.

The June 1974 summit meeting of the Strategic Arms Limitation Talks produced no important decisions having a direct impact on the maritime arena. Many possible agreements involving sea-borne strategic forces were discussed in the open literature, but none was implemented. It appears that the Soviet Union presented a potentially very important maritime

arms control procedure at this meeting. Mr. Brezhnev proposed that both nations withdraw and ban from the Mediterranean Sea all nuclear-armed warships (surface and submarine).⁶⁴ No agreement was reached, perhaps because neither side has ever admitted that it has nuclear equipped submarines or sea-based aircraft in the Mediterranean. The United States may have been disinclined to discuss this proposal because she would be greatly disadvantaged by such an agreement. The Soviet Union can retreat to the Black Sea, while the United States naval forces would have to use Rota as the nearest base to the Mediterranean Sea for any nuclear equipped ships or submarines.

Additionally, since the current Mediterranean problems are centered at the eastern end of the area, the Soviets have a short cruise, while the American ships have a 2000 mile distance to travel. Apparently the discussions, if they went very far, did not consider the French nuclear submarines in the Mediterranean, or the possible use, by other littoral states, of small boats armed with small nuclear tipped surface-to-surface or surface-to-air missiles. Nothing came of this proposal.

On the other hand, the November 1974 'agreement to agree' has a very great potential impact on the maritime arms restraint arena. In addition to setting high ceilings for strategic missile vehicles and multiple independently targeted re-entry vehicles, it allows an essential freedom to mix for

⁶⁴Malcolm W. Browne, "War Still a Risk, Brezhnev Warns," The New York Times, July 22, 1974, p. 17.

each state. This means either party could put major increased emphasis on submarine-launched missiles. If that were to occur, it might cause a consequent interest in anti-submarine warfare. This could include aircraft, surface ships, attack submarines, and electronic devices, all used to detect and pinpoint SLBM submarines for tracking and/or attacking as necessary. Any or all of these possibilities would militate against maritime arms control considerations.

The Law of the Sea Conference had made no decisions as of 1974, but its potential impact is great. The extension of the territorial seas to 12 miles (probably the outer limits acceptable to the majority of the United Nations members), the restrictions permitted coastal states within their economic zones (probably up to 200 miles from shore), and the amount of jurisdiction allowed an international regime if it oversees the exploitation of natural resources beyond the limits of national control could all limit the freedom of movement on the high seas. This could cause changes in the use and maneuverability of the nations' navies.

It seems, therefore, that the actual impact of these discussed items has been minimal so far, but the potential in each of these areas is great, depending on future decisions, especially in those conferences of a continuing nature. It is obvious, however, that the forces which inhibit the implementation of many of these proposals are the same as before--lack of political will, divergent national interests, fear of becoming militarily weaker than one's potential enemies, and

insufficient common grounds for agreement. As will be evident in the next chapter, too, these forces prey upon the maritime planners of the North Atlantic Alliance (and the Warsaw Treaty members) as they weigh the various situations within their regions.

CHAPTER IV

A CURRENT ASSESSMENT OF THE MARITIME SITUATION REGARDING STRATEGIC USES OF THE SEAS

We have during my tenure arrived at the position where the United States Navy, the odds are, is not able to perform its mission, which is the tougher mission of being able to control and use the seas, and where the odds are that the Soviet Navy can carry out its mission is war, the easier mission of cutting the sea lines of communication. This is the result of inadequate public support for adequate defense budgets and the consequent reduction--in the defense field.¹

Once one has examined the various arms control attempts and procedures as they directly and indirectly relate to the maritime situation, one must then consider the capabilities and the intentions of the maritime force available within the geographic areas being considered here. The North Atlantic Treaty has certain defined geographic limits, binding itself by particular lines on a map.² They exist and must be recognized in any considerations of NATO maritime problems. It is appropriate, therefore, to examine the regional situations

¹Elmo R. Zumwalt, Jr., "Meet the Press," National Broadcasting Company, Merkle Press, Inc., Washington, D.C., Vol. 18, No. 26, June 30, 1974, p. 2. He also said, "If we are not able to control and use the seas, we simply cannot have armies and air forces operating overseas, since 94 percent of the millions of tons that it takes to support ourselves and our allies in any kind of action has to travel on the surface of the seas....," p. 5.

²The waters covered by the North Atlantic Treaty include the "North Atlantic area north of the Tropic of Cancer" and the "Mediterranean Sea." For the complete text see: "Appendix 4, The North Atlantic Treaty" and "Appendix 5, Protocol to the North Atlantic Treaty on the Accession of Greece and Turkey," in North Atlantic Treaty Organization, NATO Facts and Figures, NATO Information Service, Brussels, 1971, pp. 270-275.

within NATO and the Warsaw Treaty Organization as they affect and reflect the geography and the force structures of these areas. The review starts with the Northern Flank, then moves into the North Atlantic, Atlantic Ocean, Tropic of Cancer, and the Southern Flank.

An examination, whether cursory or detailed, of the geographic considerations and the force structures of the NATO area would be incomplete without some notion of the thought behind the possible use of these forces. In order to provide some little insight into the Warsaw Treaty Organization concepts of maritime force employment and utility, the second part of this chapter reviews in brief the pertinent public comments of Admiral S.G. Gorshkov, Admiral of the Soviet Fleet. His series of articles was originally published in the Soviet naval journal Morskoi Sbornik, and later translated into English. While these articles by Admiral Gorshkov represent the thoughts of only one man (and there is some discussion as to why they were written in the first place), they provide at least some perspective on Soviet, and therefore Warsaw Pact, maritime philosophy. Part One assesses the geography and the forces, while Part Two touches on the utilization of these resources.

PART ONE

The Northern Flank

The Northern Flank of NATO may be considered to include Norway and the surrounding seas; Denmark, the Federal Republic of Germany and their surrounding seas both east and west; and

the sea lines of communication running through these seas to any or all of the countries involved. Much speculation has surrounded the desires of the Soviet Union in this area. Many have stated that the Soviets want year-round access to "warm water" ports (ports not blocked or severely restricted by winter ice such as those emptying into the Barents Sea or parts of the Baltic Sea).³ Others have commented that the Soviet maneuvers and intentions are oriented mostly in a defensive mode regarding Norway.

The primary Soviet objective since 1944 has been the prevention of Northern Norway becoming an Anglo-American base area.⁴

This could be applied equally to Denmark, as her foreign policy on this matter has followed Norway's closely.⁵ A British writer puts the same thought a little differently.

Traditionally, the primary mission of the Russian Navy has been to defend the homeland; and although

³S.S. Kieler, "20th Century Scandinavia in a Maritime Strategic Light," unpublished thesis, Naval Command Course, Naval War College, Newport, R.I., June 1972, p. 53. See also: B.C. Cuthbertson, "The Strategic Significance of the Northern Cap," Journal of the Royal United Service Institute for Defense Studies, Vol. 117, No. 666, June 1972, pp. 45-46; F.P.U. Croker, "Iceland and the Maritime Threat to NATO," Journal of the Royal United Service Institute for Defense Studies, Vol. 117, No. 666, June 1972, p. 52; and Walter Walker, "Problems of the Defense of NATO's Northern Flank," Journal of the Royal United Service Institution, Vol. 115, No. 659, September 1970, p. 17.

⁴Johan J. Holst, "The Soviet Union and Nordic Security," Cooperation and Conflict, Vol. 6, 1971, p. 139.

⁵Walker, "Problems of the Defense of NATO's Northern Flank," p. 22.

the nature of maritime warfare has undergone fundamental changes, there is ample evidence (including the statements of Soviet leaders) that this still pertains today, although it is now set in the context of mutual deterrence and general nuclear war.⁶

If one follows the above line of thought, then aggressive moves by the Soviets, be they naval, land, or political, are not only possible, but probable in one form or another. An amphibious threat to North Norway occupies the thinking of many strategists and military planners.

The possession of Tromso, Narvik, Trondheim, Bergen, and Stavanger--would greatly help Russia, as it did Germany in World War Two, to wage war on allied shipping.⁷

These amphibious landings might be coordinated with limited land advances along the 115-mile Norwegian-Soviet border and combined with complementary air and airborne operations to takeover airfields preventing any outside assistance.⁸ In this type of exercise, there would be little if any warning

⁶Michael McGwire, "Soviet Naval Capabilities and Intentions," p. 41. But see also: Drew Middleton, "Rifts and Soviet Pressure Worry NATO," The New York Times, September 9, 1974, p. 3, "The Soviet Government is pressing Norway for the establishment of joint Norwegian-Soviet rule of the Spitsbergen island group north of Norway--an action that would further weaken NATO's position in a strategically important area." Joint Control would thwart any allied surveillance in that area.

⁷F.P.U. Croker, "The Maritime Defense of NATO Flanks," Royal United Service Institution, Vol. 114, No. 653, March 1969, p. 53. See also: Walker, "Problems of the Defense of NATO's Northern Flank," p. 17.

⁸Claus G.M. Koren, "NATO's Northern Flank," Brassey's Annual 1969, edited by J.L. Moulton, F.A. Praeger, Publishers, New York, 1969, p. 69.

because the objectives would be limited and could be gained quickly with little opposition. A small force could go in very rapidly and occupy a discrete area without further expansion. The Soviets could then bargain, from their new position, for whatever political or military goals they desired, from port rights or facilities on the Norwegian Sea to the demands that Norway leave NATO because her membership in that organization was "threatening" to the Soviets. Soviet occupation of the more populated southern portion of Norway would be, perhaps, too difficult politically and militarily. She would have to overfly other countries or give herself away by sailing or flying substantial forces near Allied or neutral nations long enough to be observed by early warning systems. Also, the threat to or occupation of large population centers would seem to be more provocative than possession of small outposts or reserve airfields might be.

In the southern part of the Northern Flank, the Baltic and its problems are both similar and dissimilar to those of North Norway. The northern parts of the Federal Republic of Germany and Denmark are very flat and susceptible to rapid land or amphibious advances if there are no warnings. Quick amphibious thrusts from either the German Democratic Republic or Poland must be considered, as well as Soviet gunfire support from its missile-equipped forces.⁹ Most of the Baltic Sea

⁹Bernd F. vonLoringhoven, "Conventional Defense and Nuclear Deterrence--A German View," Brassey's Annual 1970, edited by J.L. Moulton, Praeger Publishers, New York, 1970, p. 22.

coastline belongs to Warsaw Pact members or neutral nations, but the exits through the Danish Straits and the Kiel Canal are controlled by NATO members,¹⁰ thus perhaps engendering in the Soviets a fear of future containment in the Baltic by the Alliance members. This fear might generate a pre-emptive move on the part of the Warsaw Pact navies to insure continued access to the open waters of the North Sea and the Atlantic with or without an accompanying land movement in Central Europe.¹¹

Any type of movement by the Soviets into the Northern Flank area must be considered as provocative enough to warrant responses from the NATO Central as well as Northern Commands; so even a quick insertion of a few Warsaw Pact occupation troops should not be calculated by that organization in isolation from surrounding areas and possible responses.¹² In other words, Soviet troops in North Norway would encounter limited local defenses, but would trigger greater and immediate responses by the NATO troops of the Allied Command Europe Mobile Force, a quick reaction unit designed to forestall just such a consideration by the WTO.

In addition to her sparsely defended northern areas, Norway has two other security problems of great portent. The first involves negotiations with the Soviet Union on the future utilization of the island of Spitsbergen, north of

¹⁰Juha Tikka, "The Strategic Importance of the Baltic Sea--A Finnish Review," unpublished thesis, Naval Command Course, Naval War College, Newport, Rhode Island, Spring 1970, p. 2.

¹¹Koren, "NATO's Northern Flank," p. 69.

¹²Walker, "Problems of the Defense of NATO's Northern Flank," p. 17.

Norway. The second arena of potential difficulties is the Norwegian Sea, in which oil has been discovered as much as 125 miles off the coast.¹³ The defense of these distant off-shore oil fields by Norway is similar to the problem faced in the North Sea oil exploration and exploitation by Great Britain, Denmark, the Federal Republic of Germany, the Netherlands, Norway. Because of their distance from the land, these areas in both Seas and their wells, drilling rigs, and pipelines are vulnerable to sabotage and destruction by sea or air military units.¹⁴ The present and future defense of these energy-producing ocean areas increases the need for and complicates the employment of the navies of the Northern Flank countries, especially in light of the changing international views of the uses of the seas. These modifications may alter the use of navies as military forces as well as the utilization of the

¹³"Off the Continental Shelf and into an Oil Bananza," The Economist, Vol. 253, No. 6842, October 12, 1974, p. 68. Oil has been discovered 125 miles west of the Lofoten Islands of Norway. Actually, whether or not this oil "belongs" to Norway is a question because of its distance from land and its great depth--3000 feet to 4500 feet. This location, geologically, is not a part of the continental shelf. "The Norwegians are trying to say that their jurisdiction extends for as far out as drilling is technically possible. But there is no international formula for settling borderline cases of this kind...."

¹⁴"International Defense Digest--Defense of North Sea Oil," International Defense Review, Vol. 7, No. 1, February 1974, pp. 23-24. "The Royal Navy has immediate demands for safekeeping rigs, pipelines, etc., against sabotage, and it's clear that pipeline junction points on the coast will be particularly vulnerable. The RN also has longer-term requirements for all-around maritime defense in the event of war," pp. 23-24. See also P.E.C. Berger, "The Royal Navy: A Concept of Maritime Operations," Journal of the Royal United Services for Defense Studies, Vol. 119, No. 3, September 1974, pp. 9-18 for a fuller discussion of the maritime problems involved, especially p. 12.

oceans.¹⁵

The Arctic archipelago of Spitsbergen is under Norwegian sovereignty according to a 1920 treaty signed by some forty countries,¹⁶ but that same accord permits the Soviet Union to mine the Islands' rich coal deposits jointly with Norway. (About three quarters of the total population lives in Soviet mining camps.) Recently, the Soviet Union has requested joint rule over the Islands, and a definition of national rights to the exploitation of the continental shelf around Spitsbergen.

Oil is believed to exist on the shelf; Oslo contends that it is an extension of Norway's continental shelf and not open to negotiation. But the Russians, it is thought, want joint rule as much for strategic as for economic reasons.¹⁷

These moves would require the abrogation of the 1920 Treaty and the division of the potential oil fields of the Barents Sea between Norway and the Soviet Union. Either or both of these changes could have a negative effect on the security of Norway and the North Atlantic Alliance.

The present Spitsbergen Treaty allows all the signatories

¹⁵For an excellent discussion of the recent United Nations Law of the Sea Conference and its effects on the employment of naval forces, see Elizabeth Young, "New Laws for Old Navies: Military Implications of the Law of the Sea," Survival, Vol. 16, No. 6, November/December 1974, pp. 262-267.

¹⁶"Status of Spitsbergen (Svalbard) Treaty Signed at Paris February 9, 1920," Treaties and Other International Agreements of the United States of America 1776-1949, Vol. 2, Multilateral 1918-1930, Department of State, Washington, D.C., 1969, pp. 269-277.

¹⁷Drew Middleton, "Oslo Expects Soviet to Ask Joint Spitsbergen Rule," The New York Times, October 6, 1974, p. 10.

(including the United States) to explore the area for coal and other natural resources, although at present only Norway and the Soviet Union are so doing. The possibility of oil development in that region could bring in several NATO nations to drill for the precious commodity. This could threaten the warm water exit of the Soviet Northern Fleet and could bring Western countries' activities uncomfortably close to the strategic naval base at Murmansk--a situation not at all to the liking of the Soviets.¹⁸ The Soviets would prefer either joint sovereignty or Norwegian sovereignty (with negotiated Soviet rights) to the present multi-party 1920 Treaty. In either of these situations, the Soviet Union would have only one nation with which to contend--a nation not unaware of Soviet military strength in the area. It must also be noted that reconsideration of the Treaty might also be in the interest of Norway, which is desirous of gaining as much potential oil area as possible in any division of the Barents Sea with the Soviet Union.¹⁹ In both the Norwegian and Barents Seas, the Norwegians have some complicated and difficult decisions to make. And whatever decisions are made, they will

¹⁸Terry Robards, "Norwegians See Threat to Isles," The New York Times, November 25, 1974, p. 9. Other issues at these Talks include fisheries limits and Moscow's revival of the earlier proposal for a nuclear-free zone in Scandinavia. (This proposal does not include the Soviet Kola peninsula or the naval base at Murmansk.) See Elizabeth Pond, "Moscow-Oslo Duel for Oil Under Arctic," The Christian Science Monitor, November 26, 1974, p. 8.

¹⁹See Christopher S. Wren, "Moscow and Oslo Open Arctic Talks," The New York Times, November 26, 1974, p. 11, and "Nothing is Easy, Not Even Talks on Barents Sea," The New York Times, December 1, 1974, Section 4, p. 2.

affect Norway's position on future maritime arms control considerations.

Assuming the Soviet Navy has a primary mission of defense of the homeland, one can view their movement away from their own shores as merely an extension of this overriding strategy. Their tasks in support of this mission are five in number. In sequential order they are:

1. to counter the nuclear powered ballistic missile submarines;
2. to neutralize the carriers prior to aircraft launch;
3. to enhance the Soviet strategic strike capability;
4. to gain command of the seas surrounding the fleet operating areas, especially the Baltic, Black, and Barents seas;
5. to provide maritime flank support for coastal and inshore operations.²⁰

Certainly these talks are not inherently harmful to the Allies unless and until hostilities occur between the two sides, and even then, the tasks enable an incremental approach to be taken by opposing naval forces. In other words, according to the tasks of the Soviet navy, hostilities are not an "all or nothing" situation but rather the application of sufficient force to protect and defend Soviet (and other Warsaw Pact) territories and maneuver areas. They believe not in massive retaliation, but in graduated responses to Western adventurism.

Forward deployment by the Soviet Navy, therefore, becomes

²⁰McGwire, "Soviet Naval Capabilities and Intentions," p. 42.

merely an attempt to push farther away from the home waters and homeland, the NATO navies, especially the strategic forces in the nuclear ballistic missile boats, and strike aircraft.²¹ The corollary of this concept gives the Navy greater areas of maritime defense surrounding the land, thus increasing the tasks of that branch of the armed forces. This expansion of the defense perimeters pushes them into the formerly uncontested waters of the Norwegian Sea,²² where they meet the NATO forces. The Alliance navies had previously operated in these waters alone, but now have company, thereby creating a vastly changed situation.

If one follows the other self-defense concept of the Soviet Union, that of Johan Holst (see footnote 4), one might imagine a Soviet Union totally uninterested in expanding her area of influence or operations. She wishes to prevent any Western powers from pressing any closer with bases or other threatening procedures. One reason the Norwegians have not permitted foreign bases on their soil is the Soviet pressure in the form of a periodic diplomatic offensive since World War II. Norway informed the Soviet Union of this in an exchange of notes, and in 1957, she made clear her policy of not stockpiling nuclear weapons.²³ Denmark has had no such exchange of

²¹MccGwire, "Soviet Naval Capabilities and Intentions," p. 38.

²²MccGwire, "Soviet Naval Capabilities and Intentions," p. 38.

²³Einar Lochen, Norway in European and Atlantic Cooperation, Universitetsforlaget, Oslo, 1964, pp. 15-16, 18.

notes with the Soviets, but she has pursued a like policy for the same reasons--similar internal political alignments and a desire not to elicit additional pressures on the Scandinavian nations--aligned or neutral.²⁴ Western bases or nuclear weapons on Norwegian or Danish soil would for example increase pressures in Finland.²⁵ This Soviet defensive argument is persuasive until one learns that the Soviet naval infantry (marines) was reconstituted in 1964 and now consists of ten to seventeen thousand troops.²⁶ They are equipped and trained for contiguous coastal area seizure rather than long-range projection,²⁷ which becomes pertinent when one notes that the coasts of Norway, Denmark and the Federal Republic are all amazingly close to the Soviet Union.

During a crisis in the Northern Flank area resupply of material or supply of combatant forces from the United States would take a week to ten days. Many analysts do not think Norway could last seven to ten days in an all-out Soviet

²⁴Walker, "Problems of the Defense of NATO's Northern Flank," p. 22.

²⁵Lochen, Norway in European and Atlantic Co-operation, p. 14. Part of Norway's reply says that she "does not intend to enter into agreements with other countries which will commit Norway to the establishment of bases on Norwegian territory for the military forces of foreign countries as long as Norway has not been attacked or threatened with attack," p. 16.

²⁶Norman Polmar, Soviet Naval Power: Challenge for the 1970's, National Strategy Information Center, New York, 1972 says 10,000, p. 76, while International Institute for Strategic Studies, The Military Balance 1973-1974, p. 7, says 17,000.

²⁷The International Institute for Strategic Studies, The Military Balance 1972-1973, p. 8.

conventional push against Norway.²⁸ The Allied Command Europe Mobile Force²⁹ is a quick reaction force to be flown into a trouble spot immediately upon need. The ACE Mobile Force being flown in could exacerbate rather than alleviate tensions caused by a WTO incursion into NATO territory, thus making its use debatable under some circumstances. It seems, therefore, that even although the British Navy is only two days' steaming time away, the Northern Flank, especially in North Norway, is not adequately prepared to fend off a surprise attack by an amphibious or air assault or both. Equally important but not discussed here are the physical problems of operating in the Norwegian Sea or the Baltic areas. The Norwegian Sea is extremely rough with high seas and difficult flying weather much of the time. To a lesser degree the Baltic is similar, but some areas are so shallow in the latter as to preclude some types of operations, most notably submarine operations.

This northern area of NATO includes the waters of the Barents, Norwegian, North and Baltic Seas and are the responsibilities (primarily) of the navies of Norway, Great Britain,

²⁸ Interview with an Allied naval officer, Norfolk, Virginia, Spring 1973. Another Allied naval officer implied that if the Soviet push were a "small" one, if she only occupied a small piece of territory, the NATO ministers might take some time to react to the situation, thus further delaying any naval force, should that decision be taken. According to Cuthbertson in "The Strategic Significance of the Northern Cap," the "Swedes have made it abundantly clear that they would not fight to preserve the territorial integrity of North Norway: their aim would be only to preserve their own neutrality," p. 47.

²⁹ The North Atlantic Treaty Organization, NATO Facts and Figures, pp. 198-199. The infantry troops for ACE Mobile Force come from Canada, Italy, and Great Britain, while the air units come from Belgium, Netherlands, and Great Britain, according to Walker, "Problems of the Defense of NATO's Northern Flank," p. 17.

Denmark, the Federal Republic of Germany and the United States.

The Norwegian Navy is committed entirely to the mission of defending her home waters and is, thus, not a far-seas fleet, nor does she anticipate any extensive distant-water use of her naval ships. The navy is designed primarily for inshore warfare and coastal defense, with most of the emphasis placed on mine warfare craft, torpedo boats, and fast gunboats, thus enabling the use of fast "hit and run tactics."³⁰ Air cover is provided by the air force (as opposed to the navy). The high seas fleet control of the sea lines of communication as outlined in the Norwegian defense plans is provided by the NATO Strike Fleet, essentially the multilateral Standing Force Atlantic backed up by the United States Second Fleet in Norfolk.³¹

While steadily reducing her navy in numbers of ships and men, Great Britain still earmarks all major ships for NATO in time of war, although some ships are assigned to overseas areas and would not be immediately available in an emergency.³² Of specific importance to the northern area are two commando ships and two assault ships, with Royal Marines embarked, which

³⁰B.C. Cuthbertson, "The Strategic Significance of the Northern Cap," p. 47.

³¹Cuthbertson, "The Strategic Significance of the Northern Cap," p. 47.

³²Secretary of State for Defense, Statement on Defense Estimates, 1972, Cmnd. 4891, Her Majesty's Stationery Office, London 1972, pp. 8-9.

Great Britain has offered to NATO.³³ She also has a frigate permanently assigned to the Standing Naval Force Atlantic,³⁴ the naval element which is designed to provide a multinational quick-reaction force to assist in time of emergency. The one remaining British aircraft carrier will stay in service until the through-deck cruisers are completed in the middle 1970's. These new through-deck cruisers will carry helicopters, Harriers, surface-to-air, and surface-to-surface missiles to "cope with attacks by aircraft, warships and submarines." But

(i)n European waters, air support for the NATO fleets will continue to be provided primarily by land-based aircraft.³⁵

In summary, it has been said that with all its far-flung

³³Walker, "Problems of the Defense of NATO's Northern Flank," p. 17.

³⁴Malcolm Parry-Davies, "British Defense Policies," Military Review, Vol. 51, No. 11, November 1971, p. 14.

³⁵"The Next Sort of Warship," The Economist, Vol. 238, No. 6652, February 20, 1971, p. 17. On the other hand, a well-known British commentator states, "... (T)he Royal Navy is lacking in air cover. The Royal Air Force provides magnificent support with its Nimrod LRMP /long range maritime patrol/ aircraft but fighter cover is another matter. The 1966 claim that the RAF would provide all that was needed was doubted at the time and these doubts have been proved painfully true in later exercises. It is a simple arithmetical fact that one cannot protect ships beyond the range of land-based fighters, and the limits of that range reaction time is generally too great." John E. Moore, editor, Jane's Fighting Ships 1973-74, St. Giles House, London, 1973, p. 77 of the "Foreward." A recent debate over the continued construction of the through-deck cruiser seems to have been settled by the latest defense review by the British Government. See "The Ministers' Statement," The Manchester Guardian Weekly, December 7, 1974, p. 3, and "Ships Go, Dockyards Stay," The Manchester Guardian Weekly, December 7, 1974, p. 10.

worldwide political commitments, the British government with its present naval assets, may have difficulty in meeting them. The balance between commitments and capabilities is "a delicate one" at best.³⁶

The third country with a vital interest in the northern area is Denmark. She sits astride the narrow entrances to the Baltic Sea, but also has her entire western coast exposed to the broad reaches of the North Sea. She shares the observation of the Skagerrak with Norway, and the seaward defense of the Kiel Canal with the Federal Republic of Germany. Although most of the Danish Navy is concentrated in the Baltic and the Kattegat, her missions include westward defense of the approaches to the Baltic Sea.

The Navy's tasks are to prevent or hamper enemy movement on the sea in order to secure the use of the waterways and to protect Danish sovereignty.³⁷

To handle these essentially local defense matters, the Danish Navy has small submarines, frigates, corvettes, torpedo-boats and mine warfare craft, with some missile boats under construction.³⁸

Denmark shares her concern in the Baltic Sea with the

³⁶Moore, Jane's Fighting Ships 1973-74, p. 77 of the "Foreward."

³⁷Erik B. Johansen, "On NATO's Northern Flank," Military Review, Vol. 51, No. 8, August 1971, pp. 67-68.

³⁸Moore, Jane's Fighting Ships 1973-74, p. 75 of the "Foreward." See also pp. 88-92 of Jane's text for a complete description.

Federal Republic of Germany, the two NATO members who have a part of the Baltic littoral. Until recently the Federal Republic's Navy operated almost exclusively within that sea, but now she has joined Denmark and the other NATO partners in operations in the North Sea and the Atlantic Ocean.³⁹ The prime missions of the Federal Republic's naval forces in the Baltic center around coastline protection and exit blockade by using "submarines, jet aircraft and small, fast surface units."⁴⁰ To fulfill these missions, the navy has destroyers, frigates, corvettes, submarines, mine warfare craft, torpedo boats, and others, including substantial building programs of submarines and fast patrol boats.⁴¹ The Danish interests in the Baltic revolve around controlling the exits and a sea or land invasion from the east. Again, the mine warfare boats are used for these purposes, as are the newly acquired missile boats.⁴²

The northern area, which interests the navies of Norway,

³⁹Minister of Defense, White Paper 1971/1972--The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces, Press and Information Office, Bonn, December, 1972, p. 31.

⁴⁰Minister of Defense, White Paper 1971/1972--The Security of the Federal Republic..., p. 147.

⁴¹Moore, Jane's Fighting Ships 1973-74, pp. 128-140 of the text. See also, Raymond V.B. Blackman, editor, Jane's Fighting Ships 1971-72, McGraw-Hill Book Company, New York, 1971, p. 76, in which he states that the trend toward smaller ships and fast patrol craft are not peculiar to the Federal Republic and are encouraged by the drastically increasing cost of larger ships.

⁴²Balckman, Jane's Fighting Ships 1971-72, p. 76.

Great Britain, the Federal Republic of German, and the "surge" or intermittent forces of the standing Naval Force Atlantic and the United States Second Fleet, also provides maneuvering space for the naval forces of the Soviet Union, the German Democratic Republic, and Poland. These Warsaw Treaty Organization members have substantial naval interests in the area.

Two of the major fleets of the Soviet Union are located in the northern and Baltic areas, while the GDR and Polish navies are used almost exclusively in the Baltic Sea. The Soviet Northern Fleet, whose sailing routes are limited by Arctic ice much of the year, has no other "choke point" restraining its freedom of movement; but this ice does force ships fairly close to the northern coast of Norway, much to the latter's concern. This fleet contains more than 100 submarines, as well as many cruisers, destroyers and destroyer-type ships, patrol and torpedo boats, and numerous auxiliary and support vessels.⁴³ The Northern Fleet also has its share of the naval infantry, although exact figures are not available. These troops are armed with standard infantry weapons and are based on the Kola Peninsula, close to the joint border with Norway.

The WTO Baltic fleets can be tightly controlled in their

⁴³Norman Polmar, Soviet Naval Power, Challenge for the 1970s, Appendix 6, p. 94 indicates 150 submarines, five cruisers, 35 destroyers, 60 patrol and torpedo boats. "Virtually all ballistic missile and cruise missile armed submarines are assigned to the Northern and Pacific Fleets." About 20 of the large surface ships carry surface-to-surface or surface-to-air missiles. Moore, Jane's Fighting Ships 1973-74, pp. 529-585, especially p. 530. See also Siegfried Breyer, Guide to the Soviet Navy (translated by M. Henley), United States Naval Institute, Annapolis 1970, for more information on the make-up of the four fleets.

freedom of movement into ocean areas by the Danes and Swedes who oversee the access routes. The Kiel Canal lies within the Federal Republic of Germany, and Norway could, in an emergency, certainly slow vessels entering through the Skagerak by using ships, planes, and mines. Even with these restrictions, the Soviet Baltic Fleet is still substantial and could pose a serious threat to an adversary. It has submarines, cruisers, many destroyers and destroyer-type ships, and substantial numbers of patrol and torpedo boats.⁴⁴ Neither of the other two Warsaw Treaty members has a deep water navy, but both have substantial assets for crisis situations within the Sea. The GDR, according to one source, has only three destroyers and escorts, while Poland has two destroyer-type ships and five submarines.⁴⁵ Other analysts indicate greater assets for these states, including coastal escorts, missile-equipped fast patrol boats, torpedo boats, mine warfare craft, and landing craft, all in considerable numbers.⁴⁶

Neither of these latter two countries is dependent on its waterborne access routes and both could probably survive

⁴⁴Moore, Jane's Fighting Ships 1973-74, p. 530. Many of these are armed with missiles and are very fast, including hydrofoils. International Institute for Strategic Studies, The Military Balance 1973-1974, p. 7 indicates 6 air cushion vehicles but not which fleet they are in.

⁴⁵United States Congress, Senate, Congressional Record, 92nd Congress, 2nd Session, Vol. 118, No. 94, June 12, 1972, Government Printing Office, Washington, D.C. 1972, p. S9185.

⁴⁶International Institute for Strategic Studies, The Military Balance 1973-1974, pp. 12 and 13 for the GDR and Polish navies assets. See also, Moore, Jane's Fighting Ships 1973-74, pp. 141-144 and pp. 252-256 for greater detail on these vessels.

without that portion of trade. But both Baltic coasts might become important if an amphibious assault on the Federal Republic or Danish shores were contemplated.

The Greenland, Iceland, United Kingdom Gap

If hostilities between the Warsaw Pact members and the NATO allies were to occur, one of the most important 'barriers' would be Greenland, Iceland, United Kingdom--GIUK Gap. This is an imaginary line running from Southern Greenland to Iceland, thence to the Faeroe Islands, and on to Great Britain. This barrier can and is patrolled by Allied surveillance aircraft and ships, looking for Warsaw Pact ships and aircraft. In order to operate in the Atlantic waters, Soviet submarines and surface ships would have to pass through this 'barrier' line.⁴⁷ Areas used for surveillance now by the NATO navies could be used in a time of emergency to track, intercept, and sink, enemy ships, both surface and submerged if necessary.

An examination of the map reveals the strategic location of Iceland in the make-up of the GIUK Gap, as indicated earlier. The original treaty⁴⁸ has yet to be renegotiated, and

⁴⁷John G. Norris, "New Strategy for NATO's Northern Flank," Sea Power, Vol. 15, No. 11, December, 1972, pp. 13-14.

⁴⁸"Defense Agreement Pursuant to the North Atlantic Treaty between the United States of America and the Republic of Iceland," Treaties and Other International Acts Series, (TIAS 2206). See also: "Defense of Iceland Pursuant to North Atlantic Treaty," Treaties and Other International Acts Series, U.S. Department of State, Government Printing Office, Washington, D.C. 1956, p. 3716. (TIAS 3716). TIAS 2206 is the basic document and TIAS 3716 is the exchange of diplomatic notes in mid-1950's which said the world situation was too serious to consider reductions then. And so it has remained to this day.

periodic attempts have been made to oust the NATO forces there, so far to no avail. It is not only the North Atlantic Alliance members who are interested in Iceland; Soviet naval exercises conducted semi-annually have extended through the Norwegian Sea, around the waters of Iceland, and into the central positions of the Atlantic Ocean.

The forward defense zone of the Soviet Union would quite clearly be established in the Iceland-Faeroe Islands gap covering the access routes to and from the Norwegian Sea.⁴⁹

This would happen only if hostilities had started between the two opposing sides.

Other analysts, for all that, carry the scenario one step farther by assuming Soviet pre-emptive military occupation of the area. Iceland is the "ideal and, indeed the only feasible site for the Soviet advanced base."⁵⁰ The Soviet Union could use political persuasion which might be effective because a strong minority of the Icelanders do not want foreign forces or bases there. If this does not work, the Soviet Navy could hold one of its semi-annual exercises in the area and then move in without any warning.⁵¹ This possibility is not so preposterous when one realizes that the Icelandic security

⁴⁹Johan J. Holst, "The Soviet Union and Nordic Security," Cooperation and Conflict, Vol. 6, 1971, p. 141.

⁵⁰Crocker, "Iceland and the Maritime Threat to NATO," p. 52.

⁵¹Crocker, "Iceland and the Maritime Threat to NATO," p. 54.

force is composed of about 500 men,⁵² while the United States provides between 3,700 and 4,000 Air Force and Navy personnel at the NATO air base at Keflavik.⁵³ Most of these are support personnel and would be inadequate in numbers or weaponry to repel an amphibious or airborne assault unit of Soviet naval infantry or paratroopers. A Soviet guarantee of Iceland's self-proclaimed 50-mile territorial sea for the protection of fishing might make the citizenry very interested in exchanging "big brothers." The heated dispute between Iceland and Great Britain over freedom of fishing beyond the 12-mile limit goes to the heart of the Icelandic economy because fish and fishing provide more than 90 percent of the island's exports.⁵⁴

It must also be assumed that the Greenland, Iceland,

⁵²T.N. Dupuy and Wendell Blanchard, The Almanac of World Military Power, R.R. Bowker Company, New York, 1972, Second Edition, p. 93.

⁵³Dupuy and Blanchard, The Almanac of World Military Power, p. 93; see also: L. Snezhanov, "Iceland: Heated Debate," New Times (Moscow), No. 6, February, 1972, p. 23, which gives the lower of the two figures.

⁵⁴"Damned Dots," The Economist, Vol. 240, No. 6675, July 31, 1971, p. 16. The territorial sea limits were extended to 50 miles in September, 1972, after sufficient warning, but Great Britain refused to recognize these new limits and continued to fish inside the territorial sea. The continued disagreement strained NATO relations. More recently, the British have agreed to negotiate the situation. See David Winder, "Time Out Called in Cod War," The Christian Science Monitor, October 3, 1973, pp. 1, 8; and "Iceland Reaches Accord in London," The New York Times, October 17, 1973, p. 8. See also, "Iceland Rescinds Plan to Close U.S.-operated Base at Reflavik," (sic), The New York Times, August 1974, p. 3. Among other things, this article states the new Icelandic Premier has declared that Iceland will extend her fishing limits to 200 miles, rather than the present 50 miles, by 1975. This move will most assuredly upset the British fishermen who have been fishing these waters for several hundred years and cause renewed friction between Great Britain and Iceland.

Faeroe Islands, United Kingdom chain provides necessary communication links across the Atlantic. For example, undersea cables could stretch across these waterways, providing secure and constant communication links for Allied use. Even short-distance atmospheric communications would be less subject to outside interference with these land stations available to retransmit the signals.

It appears that Iceland not only provides the North Atlantic Alliance with a strategically crucial spot in the ocean, but also denies to the Soviet Navy complete freedom of (unobserved) movement to and from the Norwegian Sea and the Atlantic waters. Whether or not the Soviets would try to acquire Iceland by force is certainly problematic, but the possibility exists because of her available naval units, exercise areas, and the inadequate defenses immediately available to or in Iceland. Once occupied by Soviet force, it does not seem likely that Iceland would be willing to fight to get rid of them. Diplomatic techniques seem the most probable avenues of Soviet attempts to dislodge the NATO (United States) forces, followed by efforts to disengage Iceland from NATO and, perhaps, to associate her more closely with the Soviet Union. To sustain her ships in any long-term Atlantic conflict, the Soviet Union must have unimpeded access through the GIUK gap. On the other hand, if a short war or intermittent actions take place in the Atlantic, the gap is reduced in its significance to the Soviet Union.

The English Channel and southern North Sea area should be considered next for two reasons. First, these shipping lanes

are the ocean lifelines for the NATO Allies the Netherlands and Belgium, as well as the earlier-mentioned states. The small but highly regarded Dutch Navy is divided in large measure between the Atlantic and Channel NATO naval commands.⁵⁵

The principal task of the Royal Netherlands Navy lies in Allied defense within NATO. Next to this it has a task in relation to matters within the kingdom.⁵⁶

The protection of these shipping routes, sweeping for mines along the coast and in the Channel and North Seas, and support for the Army are its primary missions.⁵⁷ The Netherlands participates with Belgium and Great Britain in the Standing Naval Force Channel, which force consists of mine countermeasures vessels operating in that area.⁵⁸ The even smaller Belgian

⁵⁵Dupuy and Blanchard, The Almanac of World Military Power, p. 102. One destroyer and a marine commando unit are usually serving in the Caribbean Sea where the Navy has responsibilities in the Netherlands Antilles Islands and the Netherlands Surinam, according to Frans P.H.M. Koch, "The Royal Netherlands Navy in the Caribbean," United States Naval Institute Proceedings, Vol. 98, No. 4/830, April 1972, p. 118.

⁵⁶The Commission of Civilian and Military Experts, The Future of the Netherlands Defense Force--Findings and Recommendations: Report to the Government of the Netherlands, March 1972, p. 21. (Copy provided by the Royal Netherlands Embassy, Washington, D.C. No publisher or place given.)

⁵⁷International Institute for Strategic Studies, The Military Balance 1973-1974, p. 16.

⁵⁸See Moore, Jane's Fighting Ships 1973-74, p. 75 of the "Foreward," pp. 40-42 and pp. 223-230, for greater detail on the naval assets. See also Drew Middleton, "Rifts and Soviet Pressure Worry NATO," The New York Times, September 9, 1974, p. 3, in which he states, "Cuts by the Netherlands in her defense budget and a review of defense spending in Britain have raised fears that alliance forces in Central Europe will be weakened." How these cuts will affect the maritime forces is not yet known.

Navy has concentrated almost exclusively on mine warfare ships and craft, while both naval air arms have helicopters and maritime patrol aircraft (Netherlands only).⁵⁹

The Atlantic Ocean

Under the overarching heading of the Atlantic Ocean, one must put such disparate problems as submarines, time needed to cross, physical properties, and other miscellaneous items.

Should hostilities occur between the Warsaw Pact members and the Atlantic Alliance members, some war plans assume resupply to Europe from the United States and Canada. Even in the best of Air Force dreams, more than 90 percent of all logistic support must travel by sea, over any appreciable period of time. There are just not enough aircraft and monies (or, perhaps, in fact, air fields) to support massive and continuous air lift.⁶⁰ If sea-lift of either combatant forces in the form of troops or of logistical support and resupply is contemplated, then the North Atlantic Alliance cannot count on using the sea lines of communication for a period of ten to 30 days. The Soviet submarine population in the Atlantic is

⁵⁹International Institute for Strategic Studies, The Military Balance 1973-1974, pp. 17 and 23.

⁶⁰Former Secretary of Defense, Robert S. McNamara, in talking of the forward deployment logistic ships (FDLS) and the integration of sealift with other methods of transportation in contingency situations said, "After testing a wide range of combinations, we found the force that gives us the required capability at the least cost: six C-5A squadrons, fourteen C-141 squadrons and 30 FDLS, pre-positioned equipment in Europe and in the Pacific, a Civil Reserve Air Fleet, and 460 commercial cargo ships." The Essence of Security, Harper and Row, Publishers, New York, 1968, p. 85. The Air Force presently has about 260 C-141 and 60 C-5A aircraft, the Navy has no FDLS.

sufficient, according to some analysts, to make maritime movements in any substantial numbers extremely difficult, if not impossible, initially. As one senior United States naval officer explained the situation, there are so many Soviet submarines that the Allies have to consider controlling "merely lanes or havens," not the whole sea.⁶¹ Moreover, the Striking Force Atlantic would have to gain control of the sea lines of communication before it could proceed to Europe.⁶² Another analyst, having finished a study on shipping problems in the Atlantic, commented that the seaborne logistic support units might have to "stand down for as long as 30 days or more" while the navies cleared the area (or sufficiently reduced the numbers) of submarines⁶³ before the merchant and/or troop ships could cross either with or without escorts.

If one assumes a distance of roughly 3,200 miles from the east coast of the United States to Great Britain and about another 1,500 miles to the north of Norway, then transit time is important. Even without submarines to make the passage difficult, six or seven days might be needed to reach Southampton and another three and a half days to get to North

⁶¹ Interview with a United States naval officer, Norfolk, Virginia Spring 1973. He implied, also that control of these lanes would be for a short time only, and only while they were actually being used, not all the time.

⁶² Interview with an Allied naval officer, Norfolk, Virginia Spring 1973.

⁶³ Interviews with a United States naval officer in Norfolk, Virginia, and a Department of the Navy civilian in Washington, D.C., Spring 1973.

Norway.⁶⁴ These calculations are based on a 20-knot sustained speed for combat units. Merchant convoys would probably take longer as their speeds are generally lower.⁶⁵ Transits cannot be made in straight lines or great circle routes because anti-submarine warfare and anti-aircraft evasive tactics must be followed to reduce losses.⁶⁶ So time must be added to the straight-line calculations, but how much is not known, as the routing tactics are classified.

The Atlantic Ocean, especially the northern half, can be extremely rough. The seas run high, there is a great deal of rain, and the atmospherics for aircraft operations can be terrible. Bad weather and poor visibility are certainly helpful to ships trying to avoid airborne or surface detection, but they also slow down and make more difficult shipboard operations and, therefore, must be judged more harmful than advantageous where speed is of such great importance.

Other problems might include such diplomatic and military considerations as what to do about neutral or third country ships in United States ports? Local war does not mean worldwide

⁶⁴The Oxford Atlas, Oxford University Press, London, 1963, p. 12.

⁶⁵Best estimates based on information available indicate about 15 to 16 knots. See figure 5-9, "MSTS Ship Characteristics," Military Sea Transportation Service, Navpers 10829B, prepared by the Bureau of Naval Personnel, Government Printing Office, Washington, 1962, p. 58. The average speed then was 13.9 knots and increased speeds can be assumed in new ships with better designs and increased capacities.

⁶⁶See: "Sailing the Convoy," Chapter 6, Naval Control of Shipping, Navpers 10830-A prepared by the Bureau of Naval Personnel, Government Printing Office, Washington, 1966, pp. 62-72.

hostilities, but transshipping is commonplace today and could put domestic goods in the hands of adversaries. Another maritime problem would have to do with United States-owned merchant ships and ships with "flags-of-convenience." Which ships can be requisitioned in a state of less than war? If taken over, would third country crews of "flags-of-convenience" ships be willing to sail into hostile areas?⁶⁷ There are other problems which could be put under the sub-heading "miscellaneous" in dealing with the Atlantic Ocean, but these seem to be the most prominent.

The Tropic of Cancer

Part of the North Atlantic Treaty reads "...an armed attack on the territory of any of the parties...in the North Atlantic area north of the Tropic of Cancer...."⁶⁸ The Cuban missile crisis, therefore, could not have been considered under NATO auspices even if the other members had wanted it to be so. Aside from the many political ramifications of this crisis, it did indicate a very real military problem--namely that an artificial barrier across the ocean brings NATO to a halt in its operating procedures, at 23 degrees 27 minutes north latitude. The doctrine of "hot pursuit" will hold only marginally after this point. More importantly, the Allies cannot protect any

⁶⁷A question posed by a United States Coast Guard officer in Norfolk, Virginia, is, whether or not the U.S. government would want third country nationals serving aboard these ships. Could they cause more trouble than they would be worth to NATO? Would they, in fact, even be willing to serve in a hostile fire zone? Interview, Spring 1973.

⁶⁸North Atlantic Treaty Organization, NATO Facts and Figures, Appendix 4, Article 6, p. 271.

of their ships or shipping beyond the Tropic of Cancer except when their naval ships operate as national units. For example, submarines (or surface ships) could harass shipping and then run south of the Tropic to relative safety from NATO forces.⁶⁹

One of the tasks of the naval forces of the North Atlantic Alliance is the insurance of the continued flow of logistic support to Europe.⁷⁰ To do this, NATO must, if hostilities occur, successfully engage adversary (Soviet) forces at sea and either remove them or drive them from the Atlantic waters. With the haven of the Tropic of Cancer always available, these forces can harass ships and shipping with impunity.⁷¹ A former Allied Commander Atlantic advocates doing away with the Tropic of Cancer as a boundary for three reasons. First, artificial lines in oceans are meaningless for naval operations. Mountains or rivers or major bodies of water are acceptable, but lines in water are not. Second, NATO shipping interests (which vitally affect the economies of all the partners) call for protection beyond this line. The need for safe passages does not begin or end at the Tropic of Cancer. Third, this line limits the awareness by the members of actions beyond

⁶⁹Interview with a retired United States naval officer in Washington, D.C. This officer was a senior official in the Atlantic Fleet-Allied Command Atlantic organization at the time of the Cuban missile crisis and discussed at length the problems of the Tropic of Cancer as a barrier to NATO, Spring 1973.

⁷⁰Ibid.

⁷¹E.P. Holmes, "NATO from a Saclant Viewpoint," Brassey's Annual 1971, edited by J.L. Moulton, Praeger Publishers, New York, 1971, p. 14.

what they see as "their" territory.⁷² A fourth factor should be added. Just because the NATO forces recognize and adhere to a boundary for their operations, is certainly no reason to suppose, or expect, an adversary to do the same. He would be foolish to do so.

Until the reopening of the Suez Canal, over 50 percent of European oil and 25 percent of its food supplies come around the Cape of Good Hope, through the South Atlantic, and across the Tropic of Cancer before they can be protected by NATO forces. It is also estimated that by 1975, about 50 percent of United States oil imports will travel this route.⁷³ Recent events in the Middle East and their effect on Western Europe have demonstrated the total Allied dependence on oil. In addition to Great Britain's Simonstown Agreement of 1955, which makes South African facilities available to NATO in time of war,⁷⁴ the Portuguese have several islands in the South Atlantic suitable for naval facilities. These facilities could be available for NATO naval escorts to protect shipping from South Africa to the North Atlantic, passing the merchantmen on from

⁷²Holmes, "NATO from a Saclant Viewpoint," pp. 17-18.

⁷³The North Atlantic Assembly, The Soviet Maritime Threat, p. 34.

⁷⁴The North Atlantic Assembly, The Soviet Maritime Threat, p. 35. But see also: Ian Aitken and David McKie, "Simonstown to 'Wither on Vine,'" The Manchester Guardian Weekly, November 9, 1974, p. 9 and "Not Worth the Risk," The Manchester Guardian Weekly, November 9, 1974, p. 1. Both these articles discuss the reconsideration of the Simonstown Agreement by the British Government. Apparently the political liability of an agreement with a government practicing apartheid is greater than the military advantages gained by such an agreement.

station to station. Sao Tome and the Cape Verde Islands both provide possibilities, as do some of the British islands in the South Atlantic. (St. Helena and Ascension are two which come to mind.) Until recently, Portugal's policy of colonial rule made her unwelcome by some of the Alliance members,⁷⁵ but her recent decisions to grant independence to the African colonies make her much more acceptable to all her partners in NATO. The present government, however, is causing NATO other problems.

Some analysts feel that if the North Atlantic Treaty were opened up for revision by considering the removal of the Tropic of Cancer as a southern boundary, some members might use this as an excuse to withdraw from the Organization.⁷⁶ This departure might take the form of French semi-association with all the benefits and few of the commitments, or a complete retreat from the Treaty itself. Greece seems to be following the French example, although most hope she will not exit completely from the military portion of the Alliance. Portugal may go also.

Within the Atlantic Ocean several navies maneuver and must be considered in assessing the forces within the area. (The Soviet Northern Fleet which sails this ocean has already been discussed.) The French, Canadian, American, and Portuguese ships all ply these waters regularly.

France actually has three ocean areas of concern: the

⁷⁵Erik B. Johansen, "On NATO's Northern Flank," p. 69.

⁷⁶Interviews with allied and United States naval officers in the Spring of 1973 in Norfolk, Virginia indicated Denmark might be the first to go with Iceland or Canada second. No one thought of Greece as the second behind France. No one anticipated the governmental change in Portugal, either.

Channel, the Atlantic and the Mediterranean Sea. Like Great Britain, she also has some overseas naval commitments, of a modest nature.⁷⁷ Although most of the present fleet of surface ships was built in the 1950s, a strong new construction program is changing that picture.⁷⁸ These new ships include a helicopter carrier, six guided missile destroyers and 14 escorts, plus some auxiliaries.⁷⁹ The nuclear ballistic missile submarine program continues with five built or building, sufficient to have at least one on station at all times.⁸⁰ Most of the larger surface ships and the nuclear powered submarines are located in the Channel and Atlantic ports.

Although France is withdrawn from the military structure of the North Atlantic alliance, her naval cooperation with NATO is well-known, and the number of exercises in which France participates has risen, "largely as a result of representations made to DeGaulle by the French Chiefs of Staff after the invasion.

⁷⁷Minister of State in Charge of National Defense, French White Paper on National Defense, Vol. 1, 1972, pp. 24-25. (No date or place of publication given. Received from the Embassy of the Republic of France, Washington, D.C., Winter 1972.)

⁷⁸Henri LeMasson, editor, Les Flottes de Combat 1972, Editions Maritime et D'Outre-Mer, Paris, 1971, p. 18.

⁷⁹Moore, Jane's Fighting Ships 1973-74, p. 75 of "Foreward," and pp. 107-127 for greater details on these ships.

⁸⁰International Institute for Strategic Studies, The Military Balance 1973-1974, p. 20. See also, "France to Build Nuclear Aircraft Carrier," The Times (London), January 24, 1974. "France has announced plans to build a nuclear-powered aircraft carrier of 15,000 to 18,000 tons, to be operational from 1980." This carrier may be equipped to handle vertical take off and landing aircraft, as well as helicopters.

of Czechoslovakia in 1968."⁸¹ Joint naval exercises in the Mediterranean have been commanded by French flag officers, and, since 1968, the French Navy has participated in maneuvers and surveillance in the Mediterranean Sea.⁸² French cooperation in Allied exercises in the Atlantic are not so well documented, but it is known that suitable French units appear during NATO maneuvers with amazing regularity to perform appropriate tasks within the overall operations.⁸³

The Canadian armed forces are an integrated organization--there is no separate navy, but the Maritime Command provides "combat-ready sea and maritime air forces to meet Canada's defense commitments...."⁸⁴ These include: territorial waters' surveillance, contributions to the allied defense of North America, joint oceanic cooperation with the United States, and contributions to international peacekeeping operations. A new and larger class of destroyers is being built to supplement the compact fleet of 18 frigates, diesel submarines, and

⁸¹"France and the Bomb," The Economist, Vol. 234, No. 6722, June 24, 1972, p. 45.

⁸²Edward A. Kolodziej, "France Ensnared: French Strategic Policy and Bloc Politics after 1968," Orbis, Vol. 15, No. 4, Winter 1972, p. 1091; Andre Beaufre, "French Defense Policy," Journal of the Royal United Service Institution, Vol. 155, No. 657, March 1970, p. 9; and "France and the Bomb," p. 45.

⁸³Interview with a retired senior United States naval officer in Newport, Rhode Island, Fall 1973.

⁸⁴Minister of National Defense, Defense 1971, Ottawa, Canada, January 1972, p. 37.

auxiliary ships.⁸⁵ Canadian moves to "reconsider" her military commitments within NATO seem to have been muted, although talk along these lines was strong for a while.⁸⁶

The largest navy of the North Atlantic Alliance members is that of the United States. Although the Navy is divided generally among four major fleets, two of them are of particular and immediate interest to NATO--the Second Fleet located at Norfolk, Virginia and the Sixth Fleet partially located in the Mediterranean.⁸⁷ Generally, the Second Fleet, with four carriers, about 60 surface ships, and half a dozen amphibious ships,⁸⁸ plies the Atlantic and provides the rotation ships for the Sixth Fleet. This latter fleet has two carriers, about 20 surface combatants, and amphibious ships with Marines embarked.⁸⁹ With these still substantial assets, the United States Navy is stretched thin in meeting all its world-wide commitments and, because of its overage ships and systems has had to reduce itself from almost a thousand active ships in

⁸⁵Moore, Jane's Fighting Ships 1973-74, p. 75 of "Foreward," and pp. 56-63 of text. See also, International Institute for Strategic Studies, The Military Balance 1973-1974, p. 19 for slightly different figures.

⁸⁶Peter Silverman, "Canadian Defense Policy," Journal of the Royal United Service Institution, Vol. 116, No. 664, December 1971, p. 43.

⁸⁷The Third Fleet is in the eastern Pacific and the Seventh Fleet is in the western Pacific Ocean.

⁸⁸International Institute for Strategic Studies, The Military Balance 1973-1974, p. 4.

⁸⁹"Key Area Where U.S. is Slipping," U.S. News and World Report, Vol. 72, March 20, 1972, p. 38, and International Institute for Strategic Studies, The Military Balance 1973-1974, p. 4.

1968 to just over 500 by 1974.⁹⁰ Owing to United States commitments to some Pacific countries, none of the Third and Seventh Fleet forces should be considered in discussing the immediate inventories of the NATO navies. Therefore, the Atlantic Alliance members could count on perhaps half of the total United States naval forces in time of crisis. It is understood, however, that most of the Atlantic forces are earmarked for NATO, but exact figures are classified.⁹¹ Present construction programs include attack submarines, destroyers, a nuclear carrier, several amphibious assault ships, and various auxiliaries.⁹² Included in the naval forces are the Marine Corps, and total combined attack and fighter aircraft exceed 2300, also about 1200 helicopters, plus fixed-wing patrol and anti-submarine warfare planes.⁹³

Another NATO ally "fronting" on the Atlantic Ocean is Portugal, with a navy smaller than that of the Netherlands. Although the overseas commitments of that navy are in a state of flux, the forces remaining in the home waters are earmarked

⁹⁰For the most recent figures by ship type see, "Naval Force Summary, February 1974, Naval Review 1974, U.S. Naval Institute Proceedings, Vol. 100, No. 855, May 1974, p. 303.

⁹¹Interview with a United States naval officer, Norfolk, Virginia, Spring 1973.

⁹²Moore, Jane's Fighting Ships 1973-74, p. 356 for exact figures. See pp. 355-513 for complete details of the naval assets.

⁹³"Naval Forces Summary, February 1974," United States Naval Institute...., p. 303.

for NATO control in time of emergency.⁹⁴ A building program includes four new corvettes to accompany the frigates, corvettes, submarines, patrol craft, and support and auxiliary vessels.⁹⁵ Portugal is an intermittent participant in the Standing Naval Force Atlantic, and her mission includes the surveillance and maintenance of the freedom of the home waters. It should also be noted that Portugal's ships easily could be used for the seaward patrolling of the Straits of Gibraltar, should that become necessary. Gibraltar, of course, is at the entrance to the Mediterranean Sea. Portugal's present political problems are extreme and may reduce her usefulness to and within NATO.

The Mediterranean Area and the Southern Flank

The last major area problem is the Southern Flank or the Mediterranean Sea. This Sea is long, over 2,500 miles, narrow and presently has but one useful entrance (or exit). Until the opening of the Suez Canal, the Straits of Gibraltar remain extremely important. It is bordered by NATO members, Western-leaning neutrals, Warsaw Pact members (although only through the Turkish Straits from the Black Sea), Communist oriented neutrals, Arab League partners, other Arab-oriented states, and Israel. The littoral states themselves have enough local and regional problems of their own, but even less than any other part of the world will they be left to deal with their own difficulties free from external interference.

From the perspective of the North Atlantic Alliance, one

⁹⁴Interview with an allied naval officer Newport, Rhode Island, Spring 1973.

⁹⁵Moore, Jane's Fighting Ships 1973-74, pp. 256-263.

of the most serious matters in the Mediterranean right now is the Arab-Israeli split, not so much because they are fighting but because the United States Sixth Fleet is in part, an example of the American commitment to Israel. In speaking of the United States commitment to NATO and possible troop reductions, a Congressional report said:

It should be remembered that the 6th Fleet is part of our NATO commitment, and any reduction that includes the 6th Fleet weakens the friendly forces--the Western sea forces--on Israel's open flank.⁹⁶

This problem of United States dual commitments in the Mediterranean has caused some very real disputes within the Alliance. For example, when the United States increased its military aid to Greece and Turkey in 1970-72 to help offset increased Soviet naval presence in the Mediterranean, the President justified this in terms of protecting Israel. He had said that, "Without aid to Greece and aid to Turkey, you have no viable policy to save Israel."⁹⁷ This naturally brought angry cries from the Arabs and denials from Greeks and Turks (who lean toward the Arabs in that conflict).⁹⁸ The Greek and Turkish govern-

⁹⁶U.S. Congress, House of Representatives, Committee on Armed Services, Report of the Special Subcommittee on North Atlantic Treaty Organization Commitments, 92nd Congress 2nd Session, Document H.A.S.C. No. 92-64, Government Printing Office, Washington, D.C., August 1972, p. 14983.

⁹⁷"Greece Denies U.S. Statement that Bases Help Protect Israel," The New York Times, August 16, 1972, p. 12.

⁹⁸The Turks favor the Arabs, if such an all-embracing term can be used, because of background, proximity, and religion. The Greeks have about 60,000 citizens living and working in the various Arab cities, especially Alexandria, Egypt, and do not want to bring any harm to overseas Greeks.

ments have both made it clear they are not interested in becoming involved in the United States pledge to Israel.⁹⁹

A second area of very definite conflict between Greece and Turkey concerns Cyprus. Despite the Alliance bonds, hostility is extreme between the two countries, and armed conflict continues between them. Apart from any Alliance allegiance, Turkey does not want to see Cyprus fall into Greek hands because the location of that island is so close to Turkey that she feels she would be at a strategic disadvantage in their bilateral affairs. Turkey does not want Greece in Cyprus. This means continuous conflict between the two NATO members. More importantly, the Greek withdrawal from the military portion of NATO seriously affects the viability of the southern flank security in that her possible withdrawal will leave a gap in the defenses. In addition to removing her own forces from the North Atlantic Alliance, Greece has indicated she is considering asking the United States to vacate her NATO/US facilities

⁹⁹U.S. Congress, House of Representatives, Committee on Armed Services, Hearings Before the Special Subcommittee on North Atlantic Treaty Organization Commitments, 92nd Congress, 1st and 2nd Sessions, Document No. H.A.S.C. 92-52, Government Printing Office, Washington, D.C., October 1971-March 1972, p. 13441. But see also: U.S. Congress, House of Representatives, Committee on Foreign Affairs, Hearings Before the Subcommittee in Europe on Greece, Spain, and the Southern NATO Strategy, 92nd Congress, 1st Session, Government Printing Office, Washington, D.C., July-September 1971, p. 380, for a slightly different view.

in Greece.¹⁰⁰ This would cause problems to the United States in her meeting of her commitments to NATO and to the Middle East.

Some of the physical properties of the Mediterranean militate against certain naval defensive procedures. Anti-submarine warfare operations are difficult because of the high ambient noise levels in the Mediterranean. At any time, there are 2,000 to 2,600 ships underway in these sometimes shallow waters. Their transit noises make 'listening' very difficult.¹⁰¹ These same noises also mean life is more arduous for the attack submarine, thus making the situation, perhaps, a standoff. The elongated, relatively narrow shape of the Mediterranean makes hiding difficult at times. Land-based aircraft could very easily locate merchant or naval ships attempting to resupply Greece or Turkey (or Italy) in the event of hostilities. This makes the political leanings of the North African littoral countries extremely important, as they could provide landing

¹⁰⁰ Ian Smart, "The Family Fight and NATO," The New York Times, August 18, 1974, Section 4, p. 5; Drew Middleton, "Greek Bases Worry U.S. and NATO," The New York Times, August 23, 1974, p. 2; David Mutch, "Italy's NATO Role Grown," The Christian Science Monitor, August 27, 1974, p. 2; and Kingsbury Smith, "Independent Cyprus of Paramount Importance to NATO Security," Boston Herald American, August 7, 1974, p. 6. Some students of Eastern Mediterranean politics feel the latest fighting over Cyprus is actually a cover for the dispute between Greece and Turkey over oil deposits in the Aegean Sea. There is no proof of this yet.

¹⁰¹ Issac C. Kidd, Jr., "View from the Bridge of the Sixth Fleet Flagship," United States Naval Institute Proceedings, Vol. 98, No. 2/828, February 1972, 28-29.

strips for Soviet aircraft.¹⁰² Attack carrier-based aircraft are potentially more vulnerable too, because the carrier does not have so much maneuver room as she might in an Ocean area. She is more 'detectable' by land-based aircraft because she cannot really hide from or avoid them if they have bases on the Southern coast of the Mediterranean.

If hostilities between NATO and Warsaw Pact forces were to occur, probably most merchant shipping (certainly all Allied shipping in the affected area) would cease until suitable escorts could be provided. The geographic constraints discussed earlier prevent independent passage or routing except at great risk. The substantial Soviet naval surface and submarine forces and the Warsaw Pact air forces pose a sufficiently serious opposition to force the Allied naval and air forces to contain or destroy these elements before much resupply could take place. The Sixth Fleet could and would support land operations, but only after it had dealt with the Soviet naval forces.¹⁰³ Depending on the numbers of ships (on both sides) and many other factors, this could take a few days or a month. Since Greece and Turkey have only about 30-days' worth of logistic supplies on hand, a protracted delay in convoy

¹⁰²Horacio Rivero, "The Defense of NATO's Southern Flank," Journal of the Royal United Service Institute for Defense Studies, Vol. 117, No. 666, June 1972, p. 8.

¹⁰³Horacio Rivero, "The Defense of NATO's Southern Flank," p. 8. See also Middleton, "Rifts and Soviet Pressure Worry NATO," in which he states, "The withdrawal of Greece from the military sector of the alliance has opened a gap in the alliance's radar network that military sources believe could have serious consequences in any future Middle East crisis."

resupply could be disastrous for them.¹⁰⁴ The mission of the Commander Allied Naval Forces Southern Europe at Naples is to protect the lines of communication across the Mediterranean with ships from Italy, Greece, Turkey, Great Britain, and the United States,¹⁰⁵ but the opposition must be controlled or eliminated before this can happen. It seems apparent that the basic missions of the naval forces in the Mediterranean-- attack aircraft, anti-submarine warfare, and convoy escort-- may all be delayed while these forces assume an initial self-protection role to preserve their own existence. After these initial steps, then they can accept more supportive roles to assist and resupply the land actions, if any.¹⁰⁶

The naval forces of the Alliance members within the

¹⁰⁴North Atlantic Assembly, The Soviet Maritime Threat, p. 30.

¹⁰⁵Kidd, "View from the Bridge of the Sixth Fleet Flagship," p. 22.

¹⁰⁶For a more complete background on recent commentary on the Mediterranean and naval policies see: Dana Adams Schmidt, "Basing of U.S. Navy in Greece in Doubt," The Christian Science Monitor, December 5, 1973, p. 8; Richard Burt, "Growing Soviet Navy Deployed in Crises," The Christian Science Monitor, December 14, 1973, p. 16; Paul Kemezis, "NATO Studies Tactical Lessons of the Mideast War," The New York Times, December 22, 1973, p. 2; Norman Polmar, "Supremacy at Sea Still a Crucial Issue," The New York Times, January 13, 1974, Section 4, p. 17; Drew Middleton, "Potential Reopening of the Suez Canal Raises Questions of Military Strategy," The New York Times, January 25, 1974, p. 6; Michael Getler, "Zumwalt Presents Grim View of Naval Power," The Washington Post, February 20, 1974, p. 2; Richard Burt, "Suez Canal Opening Could Give Soviets an Edge," The Christian Science Monitor, March 6, 1974, p. 5; Richard Burt, "Kremlin's New Naval Missile," The Christian Science Monitor, August 6, 1974, p. 1; Kingsbury Smith, "Independent Cyprus of Paramount Importance to NATO Security," Boston Herald American, August 7, 1974, p. 6; and Richard Burt, "Sea Power: U.S. vs. U.S.S.R.," The Christian Science Monitor, August 30, 1974, pp. 1, 4.

Mediterranean Sea include those at a small British naval facility at Gibraltar, the French forces in the Sea, the navies of Italy and Turkey, (and perhaps Greece with a situation similar to that of France), and the United States Sixth Fleet. The British Gibraltar force is very small and the Mediterranean portion of French assets is also modest,¹⁰⁷ but the Italian Navy is substantial.

The modern, diverse, and relatively effective Italian navy must protect her sea lines of communication because about 85 percent of her trade travels by sea.¹⁰⁸ The long-term problem of continued sufficient funding for training and operations looms as particularly severe for Italy's navy because of her 'runaway' inflation.¹⁰⁹ By judicious use of planning and designing efforts, the Italians have built three cruisers with helicopter capabilities, plus other forces of more than 30 destroyer-type ships, submarines, mine warfare craft and more

¹⁰⁷The British usually have a frigate and a Royal Marine Detachment at Gibraltar, according to the Secretary of State for Defense, Statement on the Defense Estimates 1972, pp. 9, 50. The French have destroyer-type surface ships, auxiliaries, and diesel submarines at Toulon according to Le Masson, Les Flottes de Combat 1972, p. 1. The British force may shrink shortly.

¹⁰⁸Marcello Vacca-Torelli, "An Analysis of the Strategic Importance of Gibraltar and Suez in the 70's," unpublished thesis, Naval Command Course, Naval War College, Newport, Rhode Island, April 1971, p. 37.

¹⁰⁹Frederick L. Ashworth, "The Soviet Strategic Offensive and the NATO Southern Flank," Brassey's Annual 1969, J.L. Moulton, editor, F.A. Praeger, Publishers, New York, 1969, p. 85; and David Mutch, "Italy's NATO Role Grows," The Christian Science Monitor, August 27, 1974, p. 2.

than 100 auxiliaries.¹¹⁰ The Navy also operates substantial numbers of maritime reconnaissance and patrol aircraft,¹¹¹ which work as an integral part of the NATO maritime air patrol in the Mediterranean Sea.

When (and if) Greece does operate within the context of NATO, her missions include the retention of the sea lines of communication around Greece, resupply of the Army in Thrace, limited amphibious operations, convoy resupply protection, and an antisubmarine warfare role in conjunction with the Sixth Fleet.¹¹² The dozen and a half destroyer-type ships, submarines, mine warfare craft, and landing vessels, are supplemented by four new missile boats already built by France, and some other new missile boats being built by France¹¹³ for the Greek navy.

The extreme eastern end of the Mediterranean and the passages to the Black Sea are patrolled by the Turkish Navy, another small and comparatively old navy. Although most vessels have been transferred from the United States and the United Kingdom, Turkey herself is completing two new frigates to join her other heavy surface fighting ships, patrol and torpedo boats, mine warfare craft, amphibious warfare ships,

¹¹⁰Moore, Jane's Fighting Ships 1973-74, p. 75 of "Foreward" and 176-188 of text.

¹¹¹International Institute for Strategic Studies, The Military Balance 1973-1974, pp. 22-23.

¹¹²G. Drossinos, "The Royal Hellenic Navy," United States Naval Institute Proceedings, Vol. 97, No. 3/817, p. 37, Mar. 1971.

¹¹³Moore, Jane's Fighting Ships 1973-74, p. 75 of the "Foreward," and pp. 146-152 of the text.

and auxiliaries.¹¹⁴ With these assets, Turkey guards her coast in the Black Sea; the Bosphorus, Sea of Marmara and the Dardenelles; and her Mediterranean coastal area. Perhaps the passages between the Black and Mediterranean Seas are Turkey's most important aspect, even although these waterways are closely controlled by the Montreux Convention.

Although the strategic nuclear submarines of the eastern and western alliances are not listed as part of any of the mentioned fleets and are not designated as 'area' forces of either side, they must be acknowledged as integral parts of the force structures of both sides. The capabilities of the present and proposed submarine-launched ballistic missiles and to a lesser extent the attack submarines materially affect the functional utilization and geographic placement of other existing and future naval weapons platforms. The SLBMs and nuclear powered submarines may also affect the current plans to have substantial and continuous United States naval forces in or near the European NATO waters. If this comes to pass, then the preceding comparison of Alliance and Warsaw Pact maritime forces will have to be redrawn in light of the new situation.

All advances in military and naval technology have a potential effect on the use and placement of weapons platforms, be they ships, aircraft, land-based missiles, or troops. Of particular importance to this paper, however, are the ranges of the submarine-launched ballistic missiles, the quietness of

¹¹⁴Moore, Jane's Fighting Ships 1973-74, pp. 307-314. The Federal Republic of Germany is also building at least one new submarine for Turkey, p. 309.

attack and SLBM submarines, and potential breakthroughs in anti-submarine warfare detection equipment.

The present fleet ballistic missile submarines of both sides carry missiles with ranges of 1,700 and 2,800 nautical miles.¹¹⁵ The warheads have either multiple re-entry vehicle or multiple independently targeted re-entry vehicle capabilities.¹¹⁶ With the present missiles and their maximum range of 2,800 nautical miles, the European waters are very important for launch purposes. Although the closeness of the Norwegian Sea to the Soviet Union (if Moscow, Leningrad, and Kiev are considered as NATO target areas) has diminished as the missile range has increased, the North Atlantic and the Mediterranean Sea are still within the 2,800 nautical mile radius of a circle with its center in Moscow.¹¹⁷ The proposed new Trident submarine with its Trident I and Trident II missiles,¹¹⁸ would vastly increase the operational area of the submarine-launched

¹¹⁵International Institute for Strategic Studies, The Military Balance 1973-1974, p. 69.

¹¹⁶Herbert Scoville, Jr., "Missile Submarines and National Security," Scientific American, Vol. 226, No. 6, June 1972, p. 22.

¹¹⁷Scoville, "Missile Submarines and National Security," pp. 18-19.

¹¹⁸The Trident submarine is to displace 17,000 tons (current FBM about 9,000 tons) with a length of 500 to 600 feet (vice 425 feet for the present FBMs), and will carry 24 missiles. See Ocean Science News, No. 14, August 4, 1972, p. 2. The Trident I missile will have a range of 4,000 nautical miles, while Trident II will be 6,000 nautical miles. These missiles will have a maneuverable re-entry vehicle warhead thus increasing target choice after launch. See Ocean Science on Station, No. 15, January 31, 1973, p. 1.

ballistic missile force. With a 4,000 or 6,000 nautical mile range for the missiles, these submarines would not need to launch from European waters any longer. These submarines could stay in the mid-Atlantic or Indian Ocean or off the China coast in the Pacific Ocean.¹¹⁹ The increased maneuver room for these submarines would decrease the interest of the United States in the Norwegian Sea, Iceland, the GIUK Gap, the bases at Holy Loch and Rota, and perhaps ships in the Mediterranean. As the ranges of the Soviet submarine missiles increase, their interest in the waters of the Atlantic become less strategically important for nuclear warfare. Increased SLBM range may not, however, decrease their interest in the Atlantic for ship-killing and convoy disruption purposes.

The quietness of the attack and ballistic missile submarines is important because their detection (or lack thereof) is dependent on how much noise they make.¹²⁰ Right now the technology available in anti-submarine warfare gives a distinct advantage to the submarine for many reasons, including the slow cruising speed used by the FBMs once they are on station. Slower speeds mean less noise, thus increasing detection problems. This makes detection doubly difficult as the operational areas increase in size and the time needed to reach that area

¹¹⁹Charles J.V. Murphy, "What We Gave Away in the Moscow Arms Agreements," Fortune Magazine, Vol. 86, No. 3, September 1972, p. 115.

¹²⁰John Simpson, "Technology and Political Choice in Future NATO Maritime Strategy," Orbis, Vol. 17, No. 1, Spring 1973, p. 261. 'Noise' can be caused by the propeller and the hull moving through the water, and by the machinery within the boat. U.S. submarines are significantly quieter than most Soviet boats.

decreases. As the submarine noise levels decrease, detection becomes harder and present technology does not seem to indicate any significant advances in the near future.¹²¹

Although the Soviet Union seems not to have conquered the noise problem so well as the United States, she has tested a 4,000 nautical mile submarine-launched missile reportedly to be used in the Delta class fleet ballistic missile submarine.¹²² The announcement that the Soviet Union has successfully tested a multiple independently targeted re-entry vehicle, can and probably will have a significant impact on the use and placement of her strategic missile submarines when

¹²¹Simpson, "Technology and Political Choice...", pp. 263-266. Other advantages to the submarine include: her large area to hide in; noise disturbances created by the hunting ships; noises of other ships, as merchant ships; water temperature gradients which affect the efficiency of sonar gear; and the rough ocean bottom which provides hiding places and complicates sonar echoes.

¹²²Ocean Science on Station, No. 15, February 7, 1973, p. 1. For an extensive discussion of the mechanics of Soviet naval missiles see James R. Schlesinger, Annual Defense Department Report FY 1975, U.S. Government Printing Office, Washington, D.C., March 1974, p. 47.

this missile is fitted to the boats.¹²³

The advantages accruing to the Soviet Union of a longer-range missile with MIRV capabilities compounds the ASW problems of the Alliance members and compensates for the easier detection of their noisier submarines.

Longer range Allied missiles, therefore, might have a deleterious effect on the maritime operations of the NATO Alliance since they could make the United States (especially Congress) less interested in home-porting ships overseas or in continuing such frequent cruises of ships to various European ports for extended periods of time. The increased

¹²³For more detailed commentary on the recent changes affecting submarine technology and use see: John W. Finney, "U.S. Plans to Add to Nuclear Arms," The New York Times, December 1, 1973, p. 1; John W. Finney, "New Soviet Subs Called Challenge," The New York Times, January 14, 1974, p. 5; Drew Middleton, "Navy Plans Big Antisubmarine Outlays," The New York Times, January 17, 1974, p. 12; John W. Finney, "Maneuverable Warhead Being Developed by U.S.," The New York Times, January 20, 1974, p. 1; Dana A. Schmidt, "Goals Differ on Warhead," The Christian Science Monitor, January 21, 1974, p. 3; Dana A. Schmidt, "Schlesinger's Choice: Cold War or Detente?," The Christian Science Monitor, March 6, 1974, p. 2; Drew Middleton, "U.S. Global Military Role: Are Forces Big Enough?," The New York Times, March 17, 1974, pp. 1, 3; Drew Middleton, "Defense Debate Focuses on Kind of War to Plan For," The New York Times, March 18, 1974, p. 6; Drew Middleton, "As U.S. Arms Outlays Slow, Soviet Intentions Are a Big Question," The New York Times, March 19, 1974, p. 8; John W. Finney, "Aging Fleet Called a Soviet Handicap," The New York Times, May 20, 1974, p. 17; Drew Middleton, "U.S. Is Stressing Accuracy Over Size in Developing Latest Nuclear Weapons," The New York Times, May 26, 1974, p. 1; Drew Middleton, "Navy and Air Force Upgrade Weaponry," The New York Times, May 27, 1974, p. 1; Drew Middleton, "Amid Detente, Soviet Military Expansion," The New York Times, July 1, 1974, p. 12; Frank P. Young, "Ceremony Marks End of Zumwalt Era," Evening Capital (Annapolis), July 1, 1974, p. 23; National Broadcasting Company, "Meet the Press--Admiral Zumwalt," Vol. 18, No. 26, Merkle Press, Inc., Washington, June 30, 1974; "Remarks by Admiral E.R. Zumwalt, Jr., U.S.N., Chief of Naval Operations, at the Change of Command and Retirement Ceremony, Annapolis, Maryland, June 29, 1974," provided by the Public Affairs Office, Naval Academy, Annapolis, Maryland.

operational area of the Trident with her longer range missiles would make less necessary the bases at Holy Loch and Rota and diminish the need for carriers in the Mediterranean in a nuclear war situation. They, logically, would not alter directly the non-nuclear war scenarios, but then political decisions concerning strategy and diplomacy are not always based on military logic. Since the Sixth Fleet in the Mediterranean is also part of the United States commitment to Israel, perhaps Trident and 6,000 mile missiles would not materially affect that area.

On the other hand, the increased range and capabilities of the Soviet missiles might very well necessitate an increased ASW effort by the North Atlantic Alliance to keep a better watch on the submarines and their maneuvers. ASW capabilities could include more surface warships equipped with helicopters, sonar, and other devices, and more attack submarines to hunt for the Soviet boats. Technological breakthroughs in ASW techniques as well as missile range and boat carrying capacity could all substantially affect the use and deployment of non-nuclear maritime assets within the NATO areas of concern.

In addition to the Soviet ballistic missile submarines mentioned, all of which are now stated to be in the Northern Fleet,¹²⁴ the Warsaw Pact leader has substantial surface and sub-surface forces in the Black Sea. This Fleet includes the two new aircraft carriers, a new class of cruisers, other heavy surface ships, and more than 150 torpedo and patrol

¹²⁴Drew Middleton, "Rifts and Soviet Pressure Worry NATO," The New York Times, September 9, 1974, p. 3.

boats, plus the necessary auxiliary and landing vessels.¹²⁵
Some of the diesel submarines carry cruise missiles, but most of them are into their second decade of use.

The two remaining Warsaw Treaty Organization Allies with coasts on the Black Sea are Bulgaria and Rumania. Their small and relatively ancient naval assets must be considered for local use only.¹²⁶

PART TWO

Admiral of the Fleet S.G. Gorshkov

From January through November 1974, the United States Naval Institute Proceedings published, with additional commentary by United States naval officers, eleven articles written by Admiral Sergey G. Gorshkov, the Commander-in-Chief of the Soviet Navy. Originally published in the Soviet naval journal Morskoi Sbornik, these articles provide insight into Admiral Gorshkov's views of naval and maritime matters. Analyses of these articles as to their import and meaning are continuing and opinions diverge sharply on their interpretation.

For example, John Erickson, of Edinburgh University, feels that the content of the articles is not so important as the reasons for which they were written and published in the

¹²⁵Moore, Jane's Fighting Ships 1973-74, p. 530.

¹²⁶Moore, Jane's Fighting Ships 1973-74, pp. 52-53 and pp. 263-264.

first place:¹²⁷ first, Admiral Gorshkov may be trying to educate his junior officers within the navy to his line of reasoning and philosophy of naval strategy and use. Or, he may be attempting to coalesce the opinions of the divergent groups within the navy.¹²⁸ Third, Admiral Gorshkov may not have any major educational or institutional problems within the navy. Rather, he may be trying to educate his fellow officers in the Army, Air Force, and Strategic Rocket Forces, all of whom are competing with him for their share of the military budget of the Soviet Union. Or fourth, all the military officers may be trying to educate and persuade the civilian politicians of the legitimacy and needs of all the armed forces and their own services in particular.

Although the Soviet navy has grown and expanded under Admiral Gorshkov, Professor Erickson sees it still co-existing in a 'soldier dominated' military system, that is, one in which the land strategy dominates national objectives, and most national defense expenditures revolve around ground warfare forces. With the advent of nuclear parity (with the United States), the functions of the services have undergone some modifications and this has led to a scramble for assigned

¹²⁷ This information comes from an interview with Professor Erickson in Edinburgh in May 1974.

¹²⁸ Professor Erickson sees several groups, including: the professional sailors (ship drivers); the aviators; the planners and managers; the naval politicians; and the advocates of sea power for the sake of sea power. These groups shade into each other and may have members in one or more camps. Some are dominated by flag and other senior officers, while others are full of middle grade and junior officers, but most are definable entities and can be labeled and isolated as such by Professor Erickson.

missions (or, reasons for existence). The importance of the land forces must now be shared with the other service branches. This 'job hunting' perhaps led Admiral Gorshkov to write his series on the historical perspective of the Navy; its uses past, present, and future, and the discussion of the western naval policies and the world oceans.¹²⁹ Of particular interest here are the last five articles which deal with the more modern and recent aspects of the navy and its use by the Soviet Union. Because of this increased naval emphasis, Professor Erickson is not particularly optimistic about Soviet naval interest in future maritime arms control measures. He sees the naval leadership as being more interested in maintaining and solidifying their new and increased position within the armed forces and, thus, within the decision-making apparatus of the government.¹³⁰ The ascendent importance of the naval forces may well reflect the increased 'clout' of that leader.

Yet another analyst of Soviet naval interests takes a different view of the Gorshkov papers. He sees the Admiral as

¹²⁹ According to one commentator, Admiral Gorshkov, during his tenure as Commander-in-Chief, "has changed Soviet naval strategy to emphasize five primary missions: strategic attack, strategic ASW, defense against aircraft carriers, distant operations, and interdiction." See George W. Anderson, "Commentary," United States Naval Institute Proceedings, Vol. 100, No. 7/857, July 1974, p. 63.

¹³⁰ Another observer puts greater emphasis on the Soviet Union's determinations of her own vital interests. "This, to me, is the principal lesson of these fascinating Gorshkov papers--the support and defense of vital /Soviet/ interests." J.C. Wylie, "Commentary," United States Naval Institute Proceedings, Vol. 100, No. 9/859, September 1974, p. 69.

actually setting out a new naval doctrine.¹³¹ Mr. McConnell views the naval missions as changing from those essentially of protecting the homeland, the merchant marine, and fishing interests to those now of the world-wide use of the fleet. While this world-wide protection still includes the expanded merchant and fishing interests, it also now includes the Soviet "state interests" in the Third World, seabed natural resources, and political utility in peace and war situations. Mr. McConnell also sees a new strategic role of the submarine launched ballistic missile submarines of the Soviet Union. In a conflict situation, these boats are to be used later, not sooner as originally planned. In other words, they will be held back in an initial exchange of nuclear weapons, to be used in the second or subsequent rounds as a final devastating attack upon the western allies. He bases this theory on the fact that Gorshkov views surface ships as supporting the SSBNs, a theory valid only if the submarines are to be used after an initial exchange of nuclear weapons.

The fleet no longer is used only for homeland defense. Rather it has a distant seas mission, while the submarines are to be used for a final crippling blow as opposed to an initial strike.

From these two perspectives, then, Mr. McConnell sees little reason for Soviet interest in arms control discussions, of any great substance, for limitations of submarines. There

¹³¹ Interview with Mr. James McConnell, Royal Naval College, Greenwich, May 1974. Mr. McConnell is attached to the Center for Naval Analyses, Washington, D.C., usually, but was on a leave of absence in Great Britain.

are, however, some possibilities in restraints or controls of (most likely) surface ships and their foreign deployments. The Soviets might be interested in restricting these deployments to reduce United States overseas 'influence' and thereby increase their own growing 'influence', advanced by their ship visits to foreign ports and ship maneuverings in foreign waters.¹³² The all important issue, according to Mr. McConnell, is the Soviet definition of "state interests" and what that phrase includes. If certain maritime assets fall within the scope of those perceived as necessary to preserve "state interests," then they will be immune to arms control influences. If they fall outside this framework, then they may become the subject of such negotiations.

In late 1972, Robert W. Herrick analyzed the first half of the articles by Admiral Gorshkov.¹³³ In his review of these writings Mr. Herrick categorizes the Admiral's arguments for a larger Soviet navy under the following headings:

¹³²See James M. McConnell and Anne M. Kelly, "Superpower Naval Diplomacy in the Indo-Pakistani Crisis," Center for Naval Analyses, (Professional Paper No. 108) Washington, D.C., February 1973, who state, "The India-Pakistan crisis certainly revealed the high value now placed by Moscow on coercive naval diplomacy. ...Soviet deployments during the crisis were dictated by the needs of diplomacy. Their magnitude demonstrates conclusively the significance of this factor in Soviet naval policy," p. 9.

¹³³Robert W. Herrick, "The Gorshkov Interpretation of Russian Naval History," in Michael McGwire, editor, Soviet Naval Developments--Context and Capability, Center for Foreign Policy Studies, Department of Political Science, Dalhousie University, Halifax, Fall 1972, pp. 275-289. The rest of the Gorshkov articles were published after the initial analysis.

to continue the traditional Leninist naval policy of the Party and of the more enlightened Tsars; to overcome the geographic handicap of having four separate fleet areas; to conduct globally expanding operations and deployments throughout the World Ocean; to meet the requirements for the offensive strategy made possible for the USSR by the military-technical revolution; to build the very large navy essential to avoid decline to status of a third-rate power; to continue an alleged long-standing Soviet and Tsarist policy that the Navy's size is only limited by the economy; to win the unrestricted access to the high seas essential to the USSR's further development; and to serve as a unique peacetime instrument of foreign policy.¹³⁴

Mr. Herrick supports each of his contentions by analyzing and summarizing the first six of Admiral Gorshkov's articles. For the purposes of this paper, the problems of the four separate fleets, the globally expanding deployments (to support state interests), the linkage between a large navy and the maintenance of a superpower status, the size limited only by the economy, and the use of the navy as a peacetime instrument of foreign policy are the most important. Taken as a group, these lines of thought do not indicate any great inclination toward, nor a desire for, considerations of maritime arms control discussions. Although Mr. Herrick does not state that Admiral Gorshkov (or the other Soviet leaders, military or civilian) would not be so inclined, he does posit that the Admiral considers naval arms limitation negotiations "as a capitalist snare and delusion." To him, arms limits are only useful if they at least can achieve parity for the Soviet Union, but even then, the time is always used by the capitalists

¹³⁴Herrick, "The Gorshkov Interpretation...", p. 275.

to continue the arms race in an attempt to gain the upper hand. Besides, as the Soviet view of the inter-war period indicates, these arms control agreements "never have a productive, lasting effect."¹³⁵

Perhaps of importance here is Admiral Gorshkov's tenth article entitled, "Navies as a Weapon of the Aggressive Policy of the Imperialist States in Peacetime."¹³⁶ Here, Admiral Gorshkov reviews the repeated use by Great Britain and the United States of their navies to achieve political goals through the projection of force and presence that these ships provide (or provided in the case of the British).

It would be difficult to find an area on our planet where US leaders have not used their pet instrument of foreign policy--the Navy--against the progressive forces of the peoples of various countries.¹³⁷

A little further on, Admiral Gorshkov states

The aggressive, openly anti-Soviet trend of deployment of the naval forces and the formation from them of various types of NATO strike forces, carrier strike forces, and later also squadrons of nuclear-powered missile submarines were employed for numerous threats to our country, serv~~ing~~/, as an (sic) instrument of nuclear blackmail, and was (sic) the foundation of their military doctrine.¹³⁸

¹³⁵Herrick, "The Gorshkov Interpretation....," p. 287.

¹³⁶Translation of the complete series of the original articles from Morskoi Sbornik were provided by Professor John Erickson, Edinburgh University, Spring 1974.

¹³⁷S.G. Gorshkov, "Navies as a Weapon of the Aggressive Policy of the Imperialist States in Peacetime," Tenth Article, p. 12, of translation provided by Professor Erickson.

¹³⁸Gorshkov, "Navies as a Weapon....," p. 14.

After reciting all the present and past uses of navies for nefarious policy reasons by the imperialists, Admiral Gorshkov emphasizes the use of the Soviet navy as an instrument of the foreign policy of the Union of Soviet Socialist Republics, although "the goals and methods of employing" his navy differ radically from the capitalists goals and methods for their navies. The main mission of the Soviet navy is "the defense of the country from attacks by aggressors from the direction of the ocean." However to achieve this defense of the country, the armed forces of the Soviet Union must oppose

the forces of aggression in the World Ocean with strategic defensive counterforces whose foundation is made up of the Strategic Missile Forces and an ocean-going Navy.¹³⁹

The role of the Navy as "an instrument of state policy in peacetime" is increasing not decreasing, and must continue to grow as the Soviet interests dictate increased political opposition to the forces of capitalism and imperialism throughout the world. Admiral Gorshkov certainly does not sound very interested in arms control negotiations, preferring to enlarge the Soviet Navy rather than maintain it at its present level or reduce it anywhere. One must also speculate that few military leaders will actively advocate the diminution of their own particular service missions, especially when they are charged with the protection of their respective countries utilizing those same forces.

¹³⁹Gorshkov, "Navies as a Weapon...", p. 15.

Summary

In the North, NATO needs sufficient warning of impending crisis to get forces into the area and defend thinly populated elongated Norway. On the other hand, the Soviet naval ships must pass through a narrow choke point between North Norway and the Arctic ice to get into the Norwegian Sea. They must then pass through the GIUK Gap to get into the Atlantic Ocean for any operations. Once there, their mission of sealift disruption would be much easier than the North Atlantic partners' mission of ocean resupply. The two choke points, however, can be perceived as very threatening to the Northern Fleet. The Baltic offers a short distance for surprise attack by a Warsaw Treaty member, but equally quick exit closure by an Alliance power, should any decide to do so. The naval forces immediately available seem more equally balanced within the Baltic, but their possible uses in that semi-enclosed sea could be so radically different from each other as to make "balance" and "comparison" useless exercises. Would the Soviet, Polish, and GDR ships be interested in a crisis in exiting the Baltic, and if so, what for? Or would they be more effective in support of amphibious operations against the Danish and FRG coasts, thus tying up the Baltic assets of these two nations?

Within the broad reaches of the Atlantic Ocean there is plenty of maneuver room for all the navies normally sailing these waters. But, certain areas are obviously more sensitive and important than others. From the NATO perspective, Iceland is most necessary. For the Soviets, mere denial of Iceland to

NATO use would be sufficient to their purposes. On the other hand, the United States does not need any (more) bases in Cuba,¹⁴⁰ but keeping the Soviet Navy out of there is most important.

As mentioned earlier, the Atlantic, in the present NATO scheme, would be used for extensive convoy resupply to Western Europe should a conventional war occur there. The Alliance, in that case, would have to provide merchant ships and naval escorts for the convoys. There are two problems here. The Western Allies would be extremely hard pressed to supply quickly a sufficient number (perhaps even a minimum number) of escorts to cover the many merchant convoys needed to fill Europe's needs adequately in time of hostilities. Second, the Warsaw Pact allies need a much smaller number of ships to disrupt the convoys and deny use of the sea lines of communication to their opponents. Rough analysis of the maritime forces available to both sides indicates that now the Soviet Union and her Allies can probably do exactly that. This fact, coupled with Admiral Zumwalt's pessimism recently and Admiral Gorshkov's statements in his articles about further expansion of the Soviet Navy, may lead one to conclude that the mission of convoy resupply to Europe, as now envisaged in NATO planning, will become increasingly harder, if not impossible, as time goes on.

¹⁴⁰The U.S. Naval Base at Guantanamo Bay is used primarily for "refresher" training for the men whose ships have undergone repairs or been overhauled recently. It is not an important aspect of the NATO plans.

The Atlantic Ocean also is the medium for much of the oil and trade travelling to Western Europe. Some of this comes through the Mediterranean Sea, but much also comes up through the South Atlantic, an area outside the geographical confines of NATO. Disruption of this trade, especially the oil imports, could very quickly upset the Western European (and American) industrial and economic balance and bring strong pressures to bear not previously experienced or even anticipated. Thus, the Tropic of Cancer has great symbolic importance to the North Atlantic Alliance.

Within the Mediterranean Sea, the Southern Flank of NATO seems to be tearing itself apart, despite any outside pressures to the contrary. The hostilities between Greece and Turkey, centered most recently on the issue of Cyprus (but perhaps more importantly on oil in the Aegean), have at least temporarily destroyed the possibility of any real defense or protection of NATO coming from either of those two countries. Additionally, the British presence in the Mediterranean keeps shrinking slowly but surely, as to a lesser degree does the Sixth Fleet which is hard pressed to meet United States commitments to NATO and Israel. The French are marginally increasing their naval forces in the Mediterranean, along with the Italians, but these cannot match the declines of Great Britain and the United States, or the loss of all Greek assets and some Turkish naval forces.¹⁴¹ (And, one must not forget that France

¹⁴¹The Greek withdrawal from the military part of NATO takes all her fleet assets from the Alliance. Turkey lost at least one destroyer during her invasion of Cyprus.

is no longer a part of the military aspect of the North Atlantic Treaty Organization.) None of these states can match the numbers of Soviet naval ships available for Mediterranean operations, although in combination the Western Europeans can muster greater numbers.¹⁴²

One must also remember that the Warsaw Treaty Organization ships desiring to sail in the Mediterranean must pass through the Turkish Straits, controlled by that country through the Montreux Convention. The Straits of Gibraltar are certainly wider and deeper but they are at least subject to surveillance by the British.

The examination of the maritime assets of the two treaty organizations by general numbers, types, and location must also be placed next to that remarkable series of articles written by Admiral Gorshkov, Commander-in-Chief of the Soviet Fleet. His statements about the need for an expanded navy to implement and support Soviet "state interests" is as important as the types of ships he desires. If he needs a yet larger navy to support and defend state interests, then, logically, state interests are expanding. If that is so, then maritime arms control measures would not be particularly inviting to either Admiral Gorshkov or his civilian leaders. In addition to the political implication of the Admiral's papers, the naval emphasis is of interest. He supports submarines and extended aircraft coverage of the surface ships. He also wants better

¹⁴² During the October 1973 Middle East war, the Soviet Navy had more than ninety ships in the Eastern Mediterranean while the Sixth Fleet assets were slightly more than 60 ships.

built ships for longer deployments and for greater distances from the homeland. He wants a 'World Ocean' fleet, capable of sailing anywhere for extended periods of time. Admiral Gorshkov has provided some insight into the workings of a Soviet naval mind and the implications for NATO cannot be taken lightly.

All these factors combined, then, make the maritime aspects of the NATO-WTO rivalry grim from the Western perspective. With the advent of detente politics and the defense budget cutting going on in most NATO countries, the balance of the scales will most likely not be tipped in favor of the Westerners in the near future through any building programs or other increases in maritime forces. It, therefore, seems appropriate for the Alliance members to look for some other method of lessening, if not alleviating, the inferior position which they presently occupy in this adversary relationship. An often repeated method of attempting to manage arms expenditures or gross imbalances in the relative strengths of potential or real adversaries is the use of arms control negotiations to limit, reduce, or put a ceiling on the armed forces of a country or group of countries. It seems worthwhile at this point to examine possible ways of constructing a maritime arms control agreement for use within the NATO-WTO area of interest, namely the Atlantic and the Mediterranean.

CHAPTER V

THE VARIOUS WAYS OF CONSIDERING FUTURE MARITIME ARMS CONTROL AGREEMENTS

It is a senseless proceeding to consult the soldiers concerning plans for war in such a way as to permit them to pass purely military judgments on what the ministers have to do; and even more senseless is the demand of theoreticians that the accumulated war material should simply be handed over to the field commander so that he can draw up a purely military plan for the war or for a campaign.¹

After reviewing the treaties, agreements, accords, statements, and draft proposals on various aspects of maritime arms control in this century, as well as the array of maritime assets within the NATO area of consideration, it seems necessary to re-examine these data in the perspective of possible maritime arms control considerations. Up to this juncture, the political ramifications of these historical events and material assets have not been probed deeply (and in some cases not at all). An examination of the various methods of constructing agreements will be conducted, drawing on historical precedents and current proposals from selected arms control literature. The political utility of any agreements will not be considered. The methods of considering maritime arms accord are based on those found in the recent past. Some proposals have been based on geography, while others have

¹ Clausewitz in Krieg und Kriegfuhrung, 1857, as quoted in Naval War College Review, Vol. 27, No. 1, July-August 1974, p. 24.

concentrated on restricting various types of the ships, their hardware, or their personnel. Still other propositions have centered on limiting monetary expenditures. Finally, the linkages among these methods are examined, especially as they affect the freedom of the seas and the law of the sea.

Geographic Restraints and Sanctuaries

Perhaps the most immediately appealing and initially simple agreements one might construct use geography as their determining factor. As recently as October 1974, Secretary Brezhnev, head of the Soviet Communist Party, suggested that the two major naval powers agree to remove all their nuclear armed ships from the Mediterranean Sea.

We are ready at any time to negotiate with the United States an agreement for the withdrawal of all ships, including submarines, from the Mediterranean.²

This is not the first time this Soviet proposal has been made,

²"Brezhnev Asking New Move to Curb Atom-Arms Race," The New York Times, October 7, 1974, p. 1. Elsewhere, the article indicated these withdrawals pertained to nuclear-armed ships, not conventionally-armed ships, although his quote does not say so. He said also: "To stop the arms race and then to go on to restrict armament--those are the main stages that must be reached to achieve the goal of complete disarmament," p. 1.

nor is this suggestion limited to the Soviet Union.³ American arms control analysts have made similar proposals for the Mediterranean as well as other ocean areas.

One scientist proposed that areas of the ocean be free from anti-submarine warfare technology in the form of hunter-killer submarines, surface tracking ships, and other passive or active acoustic equipment used for detecting ballistic missile submarines.⁴ While not specifying that this sanctuary for SLBMs could or should apply to the Atlantic Ocean, it is obvious that this is a primary area of consideration because submarines from any NATO or WTO navy could ply these waters. The sanctuary concept differs from the geographic restraint notion in that the former creates areas in which only certain types of vessels may sail free from hostile forces; while the latter creates areas where ships of certain types may not sail. Although these views postulated so far have discussed

³In July 1968, the Soviet Union, in a U.N. Memorandum (146) on Disarmament proposed, among other things, a limitation on the navigation zones for rocket carrying submarines; as outlined in Duncan E. Brown, "Arms Control in Hydrospace: Legal Aspects," Woodrow Wilson International Center for Scholars, Ocean Series 301, June 1971, pp. 48-49. R.M. Burrell, "The Soviet Union and the Mediterranean," Soviet Analyst, August 10, 1973, pp. 6-7, in which the author says, "... (I)n April 1967 Brezhnev called for the total withdrawal of the U.S. Sixth Fleet from both basins of the Mediterranean/Sea." Michael Palmer and David Thomas in "Arms Control and the Mediterranean," The World Today, Vol. 27, No. 11, November 1971, say that the U.S. and the U.S.S.R. might want to limit the size (not further defined) of ships they send into the Mediterranean without eliminating their numbers completely. The authors say the two superpowers might also want to include the navies of other nations to make an agreement more realistic, and, perhaps, more worthwhile, p. 499.

⁴Herbert Scoville, Jr., "Beyond SALT One," Foreign Affairs, Vol. 50, No. 3, April 1972, p. 493.

nuclear powered (or nuclear missile carrying) ships (both surface and submarine), they need not be limited to these types of ocean weapons platforms. They could just as easily apply to aircraft carriers, cruisers or other categories of ships.

Yet another proposal for a sanctuary of sorts is that of prohibiting all SLBM submarines from approaching closer than (say) 1000 miles from any coastline other than that of their own territorial waters.⁵ Again, this sanctuary with geographic restraints could apply equally to aircraft carriers, thus reducing considerably the effectiveness of the embarked aircraft. Other ships, for example ASW surface ships used for tracking or trailing SLBMs, could have similar, perhaps less distant, geographic restraints of perhaps 100 or 250 miles from another's coastline. One could envisage concentric rings emanating from a coast line, with each succeeding line prohibiting potentially more destructive or deadly types of naval ships. Thus, war at sea between similar (or dissimilar) types of ships truly would be far from land and heavily populated areas. This contradicts a study which indicates that most recent naval conflicts have been restrained (that is, not total), and in or near territorial waters of one of the participants.

If one looked for a single and simple proposition around which the whole doctrine of modern naval operations could be built, it would be that belligerent operations are permissible only within the territorial waters of the combatants each of which claim the right of self-defense. Limited war must not threaten states

⁵Discussion with Mr. John Boright, Arms Control and Disarmament Agency, Washington, Spring 1974.

other than these. Therefore, naval action must not occur beyond the territorial seas of the combatants nor can it be pursued in the territorial waters of neutral states.... Apart from limited actions by France at the time of the Algerian crisis, the only clear instance since 1945 of naval operations being carried into the high seas was during the Indo-Pakistan War of December 1971,

when a neutral merchantman was sunk with a total loss of life.⁶

Despite this theory that (extended) territorial waters will see most if not all future naval conflicts (based on past experience), the thought of 'cleaner' wars far out at sea is very appealing to many. One must also consider, however, that

a war at sea, fought in isolation away from any land battle, could become nuclear, while the battle ashore might not.⁷

More rapid escalation of a war at sea to nuclear proportions, which in turn could involve concomitant land actions both conventional and nuclear, makes the movement of possible wars to the ocean arena much less immediately appealing to strategists and arms controllers alike. An escalating war at sea, regardless of the geographic restraints or sanctuaries outlined, could lead to nuclear and/or more extensive land conflict, despite initial plans to the contrary.

⁶David O'Connell, "Can the Navy Plan for Peace?," New Scientist, October 25, 1973, p. 257.

⁷Stephen T. De La Mater, "The Role of the Carrier in the Control of the Seas," Naval Review 1972, U.S. Naval Institute Proceedings, Vol. 98, No. 831, May 1972, p. 114.

Historical precedent prior to 1945 for a geographic approach to arms restraints may be seen in the Montreux Convention (Chapter I) which restricted within a specified area certain types and numbers of ships. The ships and procedures were more important than the geography of the Turkish Straits, but the Straits were emphasized because of their location within the country of Turkey, thus making their control necessary to the security of that state.

The post-World War II era saw a marked increase in various proposals involving geographic restraints or sanctuaries, most of which pertained to nuclear weapons. Perhaps this interest in geography vis a vis nuclear arms stems from the fact that nuclear war cannot be 'won' in the traditional sense of the word. Prior to the advent of these weapons, a nation (or nations) had a good chance of defeating an opponent or opponents if it obtained sufficient manpower and weapons systems and was willing to pay the various prices (social, economic, monetary, psychological) for these means of national protection. Nuclear weapons signalled the change in warfare from a goal of winning (or not losing) to one of mere survival of a sufficient percentage of the population in a functioning condition to continue some form of the prior society. Since people could in no way escape the possibility of nuclear war (or its spillover effects) by building strong or modern or aggressive armed forces, they concluded that keeping those weapons out of their immediate geographic areas might help in avoiding the results of such an encounter. Other agreements, of course, did not relate to nuclear weapons; in fact they did

not deal with arms at all--they merely used geography as a factor in the equation of the agreements.

The post-1945 emphasis on geography as a factor in the signalling of diplomatic maneuvers was used by President Truman in his two proclamations (Chapter III) about the continental shelf and the minerals contained therein. Once so done, the use of geographic restraints or sanctuaries could be transferred to other arenas of political, diplomatic, or military interest (Chapter III).

The Territorial Seas Treaty has a form of geographic restraint built into it in that it permits coastal states to close their territorial seas as necessary for "security" reasons. The High Seas Treaty of the same year (see both Treaties discussed in Chapter II) could be viewed as creating sanctuaries of sorts because it grants warships "complete immunity from the jurisdiction of any State other than the flag State," although these havens do not provide freedom from attack, but rather areas in which warships may sail freely and need not fight each other unless political decisions are made to do so. Nuclear free zones, in which some or all forms of nuclear weapons are prohibited, are discussed in the 1961 United Nations General Assembly resolution concerning Africa and the 1964 Latin American declaration (Chapter II). Both these statements specified land and water areas free from certain types of weapons, but not all weaponry or systems. The 1962 and 1963 Rapaki Plans (Chapter III) also proposed nuclear free geographic areas, including territorial waters. But only the Latin American agreement of the four, defined in any detail

what was meant by nuclear weapons, transportation, exact longitude and latitude of the Zone and other explicit data. It seems to come closest to being a workable, realistic attempt at some sort of arms control within a geographic area.

The Soviet Union in 1962 (Chapter III) called for general and complete disarmament world wide, including the elimination of all military bases on foreign territory as a first step. It, along with subsequent disarmament proposals, was so wide in scope and narrow on realistic implementation procedures that it was not considered a truly feasible proposition.

Once the use of geography as a tool in fashioning arms agreements (be they control, restraint, limitation or prohibition) became well known, it was used with increasing frequency. A Soviet proposal in 1963 sought to declare the Mediterranean Sea a nuclear free zone (Chapter III); while the Baltic Continental Shelf declaration (Chapter II) sought an area to "be used by all states exclusively for peaceful purposes" (not further defined). This Baltic statement had been preceded by a United States commission report⁸ applauding nuclear free zones and proposing a "U.S.-Soviet Treaty establishing a zone of nuclear and conventional arms limitation under U.N. inspection in the Bering Straits and including comparable areas in Alaska and Siberia." Neither the Bering Straits, nor any of the other areas nominated for nuclear free zones was selected for further study by the United States or the Soviet Union.

⁸United States Citizens Commission on International Cooperation. See Chapter III. Other areas named by the Commission were the Near East, and Latin America and Africa, both of which already had pronouncements of some sort on the books.

Outright prohibitions based on geography are paramount in the 1959 Antarctic Treaty, the Outer Space Treaty of 1967, and the 1971 Seabed Arms Control Treaty (Chapters III and II). All three prevent the use of specified areas for nuclear weapons. As individual treaties, each has further restrictions or prohibitions: on all military efforts (Antarctic Treaty); on orbiting nuclear devices (Outer Space Treaty); and on other weapons of mass destruction (the Seabed Treaty). Of course, one might say these geographic areas were not going to be used anyway for the purposes prohibited, but one might also state that they could not be excluded from use unless someone had already considered utilizing them for such ends. These treaties are specific as to geography and prohibitions. They are vague in neither area nor weaponry definition and for these reasons have good chances of being adhered to by all parties concerned (or at least not breached or abrogated).

The latest expressions of interest in geographic restraints, limits, or prohibitions as means of controlling arms movements (and use) can be seen in the Indian Ocean Zone of Peace Proposal of 1971 (Chapter II), the current mutual force reduction talks, the European security conference, and the Law of the Sea Conference (Chapter III). All of these discussions, whether intermittent or continuing, are utilizing geographic areas as independent variables in their equations of arms control. They cannot abolish the particular weapons systems, but they can try to keep them from a particular area.

Geographic area constraints, restraints, limitations, or prohibitions have had great appeal recently to those construct-

ing arms proposals, both maritime and otherwise. It seems, however, that by examining the various proposals and agreements, one might conclude that the supervision of these pronouncements is difficult except in small areas or semi-enclosed seas. A sanctuary for nuclear-equipped submarines in the Atlantic would be hard to delimit, difficult to protect, and almost impossible to enforce. The Mediterranean provides more supervision possibilities, for example, but even that sea, with its narrow entrance channels, has several littoral states, from which nuclear weapons systems could set sail. And geographic restraints or sanctuaries have never addressed the question of the rights of the coastal states. In the Mediterranean, the French have a submarine base. They also have nuclear subs. Are they, then, to be prohibited from using their own coast for their own ships? What does that exclusion do for the sovereignty of a state over its own territorial waters?

If geographic considerations are to be used in an area like the Mediterranean, or the Baltic for that matter, to control nuclear weapons, what happens to ships other than the SLBM submarines? If aircraft carriers have on board planes capable of carrying nuclear weapons, should they be excluded also, and how is this possibility or fact to be verified? Perhaps even more difficult is the question of small ships

such as the very fast, missile carrying Osa and Komar classes.⁹ Are the states having such ships to be limited in their utilization of them within a semi-enclosed sea regardless of territorial sea sovereignty? Or, is there to be one set of rules for the littoral states covering their territorial waters, a different set of rules for the same states in the rest of the semi-enclosed sea, and still different regulations for non-littoral states' maritime assets, particularly the nuclear variety? These are some of the complexities surrounding geographic constraints and sanctuaries, but by the same token geography is only one method of constructing arms agreements--another is tonnage limitations.

Tonnage Limitations

The limitation of ship size by tonnage displacement was a popular device in the various treaties and proposals of the inter-war period. The 1922 Washington Naval Treaty (Chapter II) included the scrapping of some ships and the retention of others. Although the ships were identified by name and came under a general ratio for the participating states, the bottom line of the agreement consisted of tonnage ceilings for certain ships defined by type and gun-calibre for each country.

(Capital ships were limited to 525,000 tons for the United States and Great Britain; 175,000 tons for Italy and France;

⁹Osa class ships belong to such states as Algeria, Bulgaria, Egypt, Poland, Rumania, and the Soviet Union. The Komars are in the inventories of Algeria, Egypt, the Soviet Union, and Syria. See Moore, *Jane's Fighting Ships* 1973-74, pp. 668-669.

and 315,000 tons for Japan.)

There was not a great diversity of weapons systems available at that time to build into the various ships, so size generally could be used to determine destructive capabilities. Guns and shells could be made larger or smaller, but they were the bases for fire power measurement. Torpedoes were still in their infancy, as were airplanes; and rockets, nuclear-tipped shells, miniaturized nuclear weapons, depth charges, and exotic electronic warfare equipments were still designers' dreams. All this meant that, generally speaking, the tonnage factor was a handy and not ineffective gauge for measuring the potential of a state's navy. (Of course, other factors such as: training, quality of the workmanship, will, and political utility were of extreme importance, but they were dealt with in other portions of the inter-war period maritime treaties.)

In the 1930 London Naval negotiations, tonnage was a prominent fixture in the final treaty, although the increased emphases being placed on gun-calibre and ship-types complicated the equations. Numbers became important for the larger ships, but not yet for the smaller surface ships or submarines. For example, the United States initially sought all-around reductions in naval tonnages, staying within the ratio system established in 1922. She did not get it. More important here is the fact that the 1930 agreement recognized tonnages as significant by making the exchange of construction program information among the signatories center around the various tonnage categories rather than numbers.

Tonnage was the pivotal factor in the aborted 1931 naval treaty between France and Italy. It was also used as a part of the equation proposed at the 1932 League of Nations World Disarmament Conference. Global tonnage limitations by ship-type had been established for each signatory. Although the ratio system was not used, this formula doomed all navies not at the top of the list to eternal inferiority, which role was politically and militarily unacceptable to the governments concerned.

By 1935, tonnage was losing its place of prominence in the naval arms discussions. The London Naval Conference of 1935-1936 produced few grounds for common agreement among the participants. In fact, Japan withdrew because no one would accept her concept of a common upper limit for all the navies concerned. France and Italy still opposed fixed ratios. And the United States and Great Britain disagreed on other matters. Numbers limits, in the final treaty, were dropped within the categories of ships (defined still by tonnage and gun-calibre) subject only to prior notification of future building programs by the signatory governments. Tonnage limits thus slid from a position of great importance in negotiating naval treaties to one of inferior status. With the political pressures on each state increasing, tonnage as a determining factor became the 'lowest common denominator' of agreement. Its significance had shrunk to almost nil and its importance had diminished to being nothing more than one of the elements in a list of information supplied to the other participants concerning planned

construction programs.

The importance of size was momentarily revived in the 1936 accord between Great Britain and Germany in which they agreed to a total naval aggregate surface tonnage ratio of 100 to 35, respectively. The submarine ratio to be built by Germany was only 45 percent of that of Great Britain, again based on tonnage.

The one surviving working treaty of the inter-war period is the Montreux Convention of 1936, which has tonnage limits built into its complex system of controls. Non-riparian states' warships passing into the Black Sea are limited by type, tonnage, and numbers. These constraints hold true today and limit those United States and other NATO ships able to enter that semi-enclosed sea.

Tonnage constraints worked as a tool for measuring and limiting naval potential only so long as: (a) the weapons systems on the ship platforms were not too varied or variable (i.e., size was an indicator of ship strength and capability); and (b) the political will to bargain on substantial issues was greater than the political pressures for more and larger construction programs. Thus, it seems that even if advancing technologies and diversity of building and use of naval ships had not reduced the significance of tonnage as an accurate measuring device, the change in the political atmosphere surrounding the particular naval negotiations would have lessened its importance. This came about because tonnage changed from a size-limiting factor to merely a size-indicating factor. When ceilings were removed on building, tonnage lost its

prominence in the arms control arena.

The advance and growing diversity of weapons technology, which partially caused the diminution of tonnage as an effective tool for limiting naval armaments, should now be examined as a separate method available for measuring and perhaps setting limits on maritime assets.

Ship Types, Weapons Systems, and/or Numbers for Ceilings or Restrictions

As indicated in the preceding paragraphs, numbers of ships in certain categories were used in formulating some of the arms agreements of the inter-war period, although the bottom line of the equations were based largely on tonnage in the final analysis. Numbers in their own right became much more popular in the post-World War II era, as did greater emphasis on types of weapons.

For example, the Latin American Nuclear Free Zone prohibits and prevents the "testing, use, manufacture, production or acquisition" of any nuclear weapons. Signatories, further, cannot retain, store, install or deploy such weapons in the area. These very specific bans contrast sharply with other accords which speak of "peaceful purposes" areas, "zones of peace" and other vague terms (see Chapters II and III). The 1971 Seabed Arms Control Treaty is also specific in its prohibitions of a certain type of weapons--in this case "any nuclear weapons or other types of weapons of mass destruction" emplaced or emplaced in or on the ocean floor. In both of these treaties, the exact definitions of nuclear weapons are assumed rather than spelled out. But, these assumptions have held up

so far, and have not been tested.

More recently, the types of weapons and the numbers have been limited by the 1972 Strategic Arms Limitation Talks agreement involving submarine launched ballistic missiles carried in modern nuclear powered submarines. By that accord, the United States may have a maximum of 44 hulls capable of launching up to 710 missiles, while the Soviet Union may have 62 modern submarine platforms with 950 missile launchers (Chapter II). At first glance, this seems to be an agreement of the utmost specificity, capable of no misinterpretation by either side, but recent articles indicate that even exact numbers can be misleading.¹⁰ In counting only one type of weapon and one type of platform, other partially similar types of systems fall into a grey area of accountability. In this case, the Soviet diesel submarines with "old" missile launchers caused ambiguous interpretations on the United States side. This particular problem seems to have been alleviated through further negotiations, but it is indicative of the complexities of any comparisons (or agreements) in which one side has a system differing in even one aspect from a comparable system of the other side.

¹⁰ See Leslie H. Gelb, "The Story of a Flap," Foreign Policy, No. 16, Fall 1974, pp. 165-181, for an excellent summary of the "loophole" in the 1972 Agreement concerning the numbers of submarines and missiles the Soviets could have. This article recounts the "numbers game," but also the internal bureaucratic conflicts and the stress between the Executive and the Legislative branches of the federal government. Mr. Gelb describes the different interpretations put on the numbers, i.e., what in fact was being counted. He also describes the different emphases placed on parts of the agreements in statements made by various political leaders. The statements, themselves, indicate deliberate or unintentional misunderstandings of the numbers and to exactly what they referred.

When one is dealing primarily with numbers, as is the case in the mutual balanced force reductions talks in Europe, they can assume a life of their own. The NATO allies, for example, proposed a ceiling of 700,000 troops (stationed and indigenous) on each side. On the other hand, the WTO advocated a 15 percent reduction of forces on each side. Both sides are concentrating on numbers, both (at least superficially) want some sort of reductions of armed manpower in the European theater, both are willing to continue negotiations to achieve the goal of reduced troop strength. But, even using the same tool--numbers--to obtain these ends, the two sides have different formulae to get there.

The problems of the mutual force reduction talks, and those generated by the supposedly specific SALT I Agreement, are magnified when one considers transferring them to the general maritime arena. A quick glance through such publications as Jane's Fighting Ships, The Military Balance, Les Flottes de Combat, and Breyer's Guide to the Soviet Navy, will indicate the multiplicity of ship types and the diversity of names for similar types of ships. Further reading indicates that similar ship hulls can and are fitted with myriad different weapons. For example, the Soviet Union is completing two aircraft carriers¹¹ apparently equipped to carry vertical take-off and landing aircraft. These carriers also have surface-to air-missiles and torpedo tubes. The United States, on the other hand, has 15 aircraft carriers (one nuclear powered) and

¹¹Moore, Jane's Fighting Ships 1973-74, p. 531.

all capable of handling a variety of aircraft. Most of these latter carriers have point-to-point defense missiles aboard, but none can launch torpedoes.¹² The Soviet Union has a cruise missile, capable of sinking ships at sea, which can be launched from submarines as well as surface ships.¹³ The United States has no such weapon in the current inventory.¹⁴ The Soviet Union has more cruisers than the United States, but the latter has almost 200 destroyer/frigate/escort type ships. The Soviets have about 180 destroyers and escorts.¹⁵

After one has accepted the fact that similar types of ship hulls have different names, one must then understand that the same names in different navies refer to different ship types. The United States has: guided missile frigates (some with nuclear power) of 5,800 to 10,000 tons displacement; destroyers of 3,500 to 6,900 tons displacement; and cruisers from 14,600 to 17,500 tons displacement. The Soviet Union's cruisers range from 6,000 to 19,200 tons displacement; her destroyers from 3,500 to 5,200 tons displacement; and her

¹²Moore, Jane's Fighting Ships 1973-74, pp. 392-403.

¹³The International Institute for Strategic Studies, The Military Balance 1973-1974, p. 69.

¹⁴See Richard Burt, "Sea Power: U.S. vs. U.S.S.R.," The Christian Science Monitor, August 30, 1974, 1,4; "Soviet Navy Has Edges on U.S., Jane's Says," The New York Times, August 29, 1974, p. 9; Richard Burt, "Kremlin's New Naval Missile," The Christian Science Monitor, August 6, 1974, p. 1; and "Elsewhere in the News-International," The Boston Globe, October 4, 1974, p. 2. In this last article, the successful testing of a 5000 mile SLBM was indicated in the Soviet Union. The comparable U.S. SLBM has a range of about 3000 miles.

¹⁵The International Institute for Strategic Studies, The Military Balance 1973-1974, pp. 4 and 7.

frigates from 1,100 to 1,900 tons displacement.¹⁶ The figures are not important in themselves. They indicate that a frigate in the United States Navy is a large surface combatant, the same name in the Soviet Navy is used for a relatively small surface combatant ship. Even destroyers, which appear to be at least relatively comparable, are equipped differently and have differing missions and armaments to accommodate their divergent tasks.¹⁷

How does one compare a somewhat smaller United States nuclear powered cruiser with a larger conventionally powered Soviet ship of the same type? Can one equate a point defense missile system with a cruise missile system on a surface combatant? And, if one is going to compare these surface ships, where, in the equation, does one put the ships of the Allies of these two super powers? For example, the British have contemplated MIRVing their Polaris missiles in an attempt to

¹⁶Moore, Jane's Fighting Ships 1973-74, sections on U.S. and U.S.S.R. All figures are for full loads.

¹⁷"(T)he U.S. and Soviet fleets for some time are likely to remain very different and very difficult to compare. There is no simple way to add up ships and determine the quantitative balance. Neither can a force level comparison take into account the striking qualitative differences between the two fleets: the vast differences in the performance characteristics of ships, weapons, aircraft, and electronic equipment. While there might be a consensus of expert opinion as to whether the United States or the U.S.S.R. has supremacy in one area of naval capability or another, any assessment of the degree of difference, or the implications of such differences for aggregate capabilities should be treated cautiously." Barry M. Blachman, Edward M. Gramlich, and Robert W. Hartman, Setting National Priorities--The 1975 Budget, The Brookings Institution, Washington, D.C. 1974, p. 121.

increase the nuclear force without building more submarines.¹⁸ The British have a Royal Fleet Auxiliary which provides direct fleet support for the combatant forces and have recently created the Royal Maritime Auxiliary Service to provide services in such areas as ocean research, ocean towing, cable ships, and salvage ships.¹⁹ Within other navies on the other hand, some of these functions are provided by the integral units of the force. The French are planning to build a nuclear powered aircraft carrier of 15,000 to 18,000 tons, to be operational after 1980.²⁰ This carrier is very small compared to United States, Soviet, and British carriers, but compares favorably with the British through-deck cruiser which will be capable of launching vertical and short take-off and landing aircraft.²¹

These problems are not limited to ship types and utilization. Aircraft used in conjunction with naval units provide yet another complex issue. In the United States Navy, naval aircraft (or planes with naval missions) are an integral part of that service. The planes are manned by, maintained by, and assigned to naval forces. Aircraft with many of the same

¹⁸Louis Heren, "Navy May Buy New Nuclear Warheads," The Times (London), February 12, 1969. It does not appear now that this will occur because of the severe economic problems of Great Britain, but it is a possibility.

¹⁹Ministry of Defense, "Royal Maritime Auxiliary Service Formed," Ministry of Defense, London, Press Release, No. 129/70, September 3, 1970, 1 page.

²⁰"France to Build Nuclear Aircraft Carrier," The Times (London), January 24, 1974.

²¹Moore, Jane's Fighting Ships 1973-74, p. 318.

missions for the Royal Navy are flown by, owned by, and a part of the Royal Air Force. (Carrier aircraft are still manned by RN personnel.) Yet a third situation exists in the Soviet Union. The Soviet Navy has an integral air arm, but so far all her fixed-wing aircraft are land based (this may change as her two carriers join the operating forces). These varieties of organization of naval components (or components used in a maritime mode) indicate the difficulties in formulating any arms agreements.

Submarines might be divided into two categories--attack (anti-ship subs) and strategic (missile-launching subs). But beyond this gross division, the problems of categorization are compounded. Is a nuclear powered attack submarine equal to two diesel powered attack boats? What happens if the nuclear-powered sub also has cruise missiles aboard? And what about torpedoes on submarines--are they equal to cruise missiles? These are just some of the complexities in determining type, equivalent weapons systems, and comparable restrictions and/or ceilings on these diverse varieties. Within these categories, one must also consider active inventories, reserves, and "mothballed" ships. Reserve ships in the United States Navy are fully ready for operations and are manned by a substantial number of active duty personnel whose complement is filled out by active reserve personnel. How should these ships be categorized?

When discussing similar types of weapons systems, one must recognize a potentially hazardous technological innovation-

miniaturization. The use of small "tactical" nuclear weapons is already being discussed as useful for armies, especially in the European theater. The transfer of this concept to the maritime arena compounds the problem of systems comparisons. A conventional destroyer with a typical weapons array could become a devastatingly different threat if her guns fired a rocket assisted, nuclear tipped projectile and her torpedoes carried small nuclear warheads.²² That some surface ships are already capable of carrying nuclear weapons has not been disputed in this country, and some say that "any ship capable of carrying nuclear weapons now carries nuclear weapons."²³ Nuclear tips to warheads carried by missile firing combatants like the Osa and Komar class small boats increases their destructive power almost geometrically compared to a similar craft conventionally equipped. This is not to say that these weapons will come to be used, but they are very distinct possibilities and cannot be ignored merely because they are not yet in place, so far as is known in the open literature.

The difficulties of restraints by ship types, weapons systems, and/or gross numbers of ships, leads to the consideration of other possible methods for implementing arms agreements. Perhaps ceilings on manpower may provide a useful tool

²²These ideas were initially posed in a discussion with a staff member of the Arms Control and Disarmament Agency, Washington, D.C., Spring 1974.

²³So stated Gene R. LaRocque, a retired U.S. naval officer, to a Congressional Subcommittee, as quoted in Fox Butterfield, "U.S. Atomic Arms Again Stir Tokyo," The New York Times, October 8, 1974, p. 7.

in formula-making.

Manpower Limitations by Service or by Overall Armed Forces Numbers

In reviewing past maritime arms measures, limitations by manpower ceilings is not a new concept. John Bellers wanted to limit his 100 equal provinces of Europe to "1000 soldiers or an equivalent in ships or money for enforcement of rules and defense of the league," (Chapter I). The World Disarmament Conference at Geneva in 1932 sought limits on the maximum number of sea personnel ("effectives"), their length of conscripted service, and reserves (Chapter I). The Versailles Treaty had actually limited the German Navy by numbers and types of ships, as well as by maximum numbers of personnel (15,000), and extended enlistments with no conscription (Chapter I). It must also be noted that the first two proposals were not accepted by any states, and the imposed Versailles limits were ignored by Germany when she began to re-arm herself.

Manpower ceilings again appeared as part of arms constraints packages in the early 1960's, with the general and complete disarmament proposals of the United States and the Soviet Union at the Eighteen Nation Disarmament Committee meetings in Geneva (Chapter II). These draft treaties set overall armed forces limits for the two superpowers and lesser ceilings for other states. The procedure is reminiscent of the tonnage scales of the Washington Naval Treaty, and assumes that the other nations will accept their inferior status as

signalled by their lesser numbers of personnel. Manpower constraints were not the only limits in these drafts--others included percentage reductions of aircraft, subs, and surface ships; weight limits on some ships; time scheduled destruction of certain weapons systems; elimination of specified military installations; and budgetary controls. The GCD proposals have not been accepted by any country so far and probably will not be in the foreseeable future because they rely on a strong international peacekeeping force to protect the individual states which agree to reduce drastically their national armed forces. The acceptance of assigned inferior status is also difficult for many states to digest--the taking of lower manpower limits and the concurrent secondary or tertiary levels consigns the nations to these roles in perpetuity (or at least for the duration of the treaty).

Another aspect of manpower ceilings not addressed recently in proposals or draft treaties is the makeup of the 'armed forces'. (The World Disarmament Conference of 1932 went into great detail, but this specificity has not been repeated recently.) As an example, the United States has Army, Navy, Air Force, Marine, Coast Guard, and National Guard in her inventory of armed forces. Within these services are active duty military personnel, reserves on active duty, personnel in stand-by reserve status (several categories of these); civilians working directly with the naval forces (as the civil service merchant seamen manning Military Sealift Command supply ships which victual combatant ships); civilians working in the

headquarters, supply, support, and logistic commands of the Navy; and within all these categories private civilians and/or companies working on a short term or contractual basis. In considering 'manpower' ceilings, one must take into account these diverse categories of men and women and how they fit into the overall armed forces picture. Presently, the United States, like Canada and Great Britain, has no draft or conscriptive service, but the trained reserves of these (or any) states provide potential for expanded resources. Other nations have extensive compulsory service programs of varying lengths, and large numbers of trained, ready reservists.²⁴

If the limits, reductions, or ceilings decided upon in a maritime arms agreement settle the questions of 'naval personnel', how, then, are the spinoff effects on the other armed forces to be met? Would a reduced navy, in turn, dictate a reduced Marine Corps or a smaller army, both of which rely on the navy for some forms of transportation and gunfire support? The Military Sealift Command provides some support services for the United States Navy, but it also provides extensive surface shipping to other departments of the executive branch of the government. Are these, too, to be considered in any curtailment

²⁴For example, the Soviet Union has compulsory military service of 2-3 years, depending on the branch of service; the other WTO states have between 16 months and 3 years. The United States, Great Britain, Canada and Luxembourg have voluntary service, while the other NATO nations have compulsory or draft service of 12 to 48 months depending on country and branch of service. The U.S. has about 837,000 ready reservists; the other NATO countries very roughly have about 3.6 million. The U.S.S.R. has 700,000; the other WTO members have very roughly about 1.9 million trained reserves. All figures from the International Institute for Strategic Studies, The Military Balance 1973-1974, pp. 10, 11-13, 17-25.

of naval activities? The Soviet Union relies heavily on its civilian merchant fleet for resupply and replenishment of its naval ships at sea.²⁵ How does one calculate this in a maritime equation on arms control?

A last question one must examine in any maritime arms consideration in the NATO area of interest which centers around manpower controls, is that of navy to navy comparisons. Is it, in fact, realistic to compare the United States Navy (or the NATO navies) to the Soviet Union's Navy (or the WTO navies)? The Soviet Union is generally considered a land power connected to her allies by land. Naval forces, at least until recently, were of secondary importance and were utilized for coastal defense and a minor anti-shipping role. The United States and the other NATO members, on the other hand, are connected by oceans and seas, including the Atlantic and the Mediterranean. The lines of communication run across water not land, and these nations are almost totally dependent on the sea lanes for resupply and assistance provided by other members.

²⁵See David Fairhall, Russian Sea Power, Gambit Incorporated, Boston 1971, especially Chapter 11, "The Red Fleet in Blue Waters," pp. 203-222. "In general the range of Soviet naval activity has been increased in parallel with the rapid expansion of the Russian merchant fleet. ...Some of the direct ways in which Russian merchant vessels can assist their naval colleagues /include/...a tanker sent out to refuel a submarine, a trawler collecting hydrographic data, a scientific research vessel monitoring NATO communications," p. 203. And, "One of the striking things about this new oceanic presence is that it does not depend on having naval bases scattered throughout the world. Like other big modern navies, the Soviet fleet is truly independent of the land when it wants to be," p. 207. And, "The Soviet Navy now operates a fleet of about 150 major auxiliaries, more or less equally divided between /sic/ oilers, supply vessels, and repair ships. The oilers can be supplemented by merchant marine tankers...which are also used to supply the long range fishing fleets at sea," p. 210.

If the NATO navies (and the waters which they ply) are the vital links among these states, then should they be considered in an arms agreement with the navies of the WTO--navies which are of at least secondary (and perhaps tertiary) importance in the overall military strategies, both offensive and defensive (if one can make such distinctions), of this latter Alliance? In other words, if the oceans provide the vital links for NATO, and the land provides the vital links for the WTO, should not the primary armed forces of these two arenas be compared--that is, the NATO naval forces with the Warsaw Pact land forces?²⁶ Such questions may seem ridiculous at first glance, but if they are not examined carefully, a maritime arms agreement might be constraining a vital portion of one side's armed protection force but only an important element of the other side's protection forces.²⁷

Personnel ceilings, limits, or reductions are not so

²⁶Of course, such questions as: how many ships equal how many divisions and of what varieties are almost beyond comprehension, but they would arise in this type of arms consideration.

²⁷For a brief but good summary of the U.S.-Soviet naval balance see Blechman, Gramlich, and Hartman, Chapter 5, "Assessing U.S. Military Requirements," in Setting National Priorities--The 1975 Budget, pp. 99-132, especially pp. 118-124. See also the following: "The Soviet change of emphasis from a military strategy based almost exclusively upon land-based forces to one incorporating elements of a maritime capability raises fundamental questions, directly with regard to Norway's security, and indirectly in respect to Norway's future in NATO." And, "However, Norway and NATO's northern flank constitute only half of the problem generated by the change in Soviet strategy. As in the North Atlantic, so in the Mediterranean there is an ever-growing Soviet maritime presence." Martin Edmonds and John Skitt, "Current Soviet Maritime Strategy and NATO," International Affairs (London), January 1969, pp. 35 and 38 respectively.

easily constructed, then, as one might imagine at first sight. They rival ship-type restraints in complexity and diversity of problems. What types of people within the navies, what types of naval elements (or other elements) within the armed forces, and what other elements which affect the navies are to be considered in a maritime agreement? All of these people (and their ships and weapons systems) must be paid for by some division of the government, however, so perhaps the problems of devising a maritime arms agreement can be examined through budgetary constraints. If the initial flow of money is restricted, then the numbers, amounts, and quantities of what it buys will be controlled.

Budgetary Limits, Ceilings or Reductions

William Penn sought to spend the excess of funds resulting from disarmament on other, more important, projects. He perceived disarmament (or arms reductions) as causing a reduced expenditure of money. The reverse procedure, the control of the expenditures to force arms restraints, was proposed in the Russian Circular Note of 1899 which advocated in part the "non-augmentation" and eventual reduction of land and sea forces budgets (Chapter I). The inter-war period saw such innovations as naval 'holidays' on building, and the scrapping of some ships, but these induced financial easements, rather than being compelled by budgetary ceilings or limits, were the results of other reductions. The Greco-Turkish Treaty of 1930 aimed for no "unnecessary increase in their expenditure/s/ on naval armaments," but did not actually impose spending restraints

(Chapter I). The 1932 World Disarmament Conference included specified budgetary limitations for naval armaments among its proposals (Chapter I). The 1971 Indian Ocean Zone of Peace proposal expressed the desire to spend the limited funds available on "economic and social reconstruction" rather than military measures, but used geographic exclusion from the area, rather than their own military budget limits, as the method for achieving these goals (Chapter II). The 1962 Soviet GCD proposal included reduction of military expenditures as one method of arms control. Other proposals and agreements have foreseen budgetary benefits as results of arms negotiations, but not the method for the limitations in the first place. (Some of the public discussions of proposals for the SALT II Agreements foresaw reduced or at least not increased budgetary expenditures as a result of those proposed accords.)

Budgetary controls as the governing factor in an arms agreement equation, on the other hand, have a whole different set of problems involved with them. The first of these is the same as for tonnage, numerical, or manpower ceilings--that of the inferiority accorded all those states not in the first or top category. Would other NATO and/or WTO members accept lesser military budget ceilings than those of the United States or the Soviet Union whether or not they intended to spend to those ceilings? Would states in the third echelon of limits demand to be in the second level for political prestige, regardless of how much they actually spend on arms?

A Second problem is similar to that of manpower controls--

would money restrictions hold for maritime forces only (assuming all elements of these forces could be mutually agreed upon), or should budgetary limits be spread over all the armed forces of a state? If this latter were to be part of an agreement then what parts of the military establishment would be included: active inventories, reserve inventories, civilian payrolls, research and development in private industry, etc.? For example, in the United States, government payment of academic or business R & D need not involve the exchange of funds--it could be paid for through complete tax exclusion, and thus never appear as a line item in the annual defense budget. In a closed society such as the Soviet Union the hiding of military or naval expenditures in other areas of the budget are easily accomplished and not readily

exposed.²⁸

A third, and perhaps the most complex aspect of budgetary controls on arms expenditures (be they naval, maritime, or total armed forces) involves the tool used to measure the money being discussed. If dollars (for example) are the measure, then how are they to be compared with the Soviet ruble--by official exchange rates or estimated actual corresponding values? Who will determine the values? How will one account for inflation in one country and not another; or revaluation

²⁸"No single figure of Soviet defense expenditure in dollar terms can be given, as precision is not possible on present knowledge. Budgetary information is lacking. The Soviet defense budget, which has remained implausibly static at just under 18 million rubles a year since 1969, excludes a number of items: military R & D, stockpiling, civil defense, foreign military aid, as well as space and nuclear energy programs; and also frontier guards and other security troops. The largest of these missing items is military R & D, much of which is thought to be financed out of the growing votes for science. The all-Union science budget has grown at a rate of 9 percent a year since 1969, equivalent to doubling over eight years.... From the International Institute for Strategic Studies, The Military Balance 1973-1974, p. 8. The article goes on to say that other unidentified defense-related R & D is in the budgets for Higher Education Institutions and Enterprises and that the total Soviet defense budget may range from \$81 to \$90 billions for FY 1973. "It must be borne in mind, however, that this method uses United States price weighting. The relationships could be very different if Soviet prices were used as weights instead," p. 11. Of course, this hiding of defense expenditures in other areas of the total budget is not limited to closed societies--it happens in the U.S. as well, but to a much lesser extent and with less chance of perpetual secrecy. See also: J.G. Godaire, "The Claim of the Soviet Military Establishment," in Joint Economic Committee, Congress of the United States, Hearings on the Dimensions of Soviet Economic Power, 87th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., December 1962, pp. 33-46, for information on the dispersal of defense expenditures throughout other sections of the budget.

or devaluation of a state's currency?²⁹

If a flat rate of expenditure for each state is not acceptable, then perhaps a percentage of that country's total annual budget could be allotted for military matters. This would solve the problem of first and second rate powers, because no one would have to accept second or lower level status vis-a-vis the first level powers. The measurement of this percentage (say a maximum of 10 percent of the state's gross national product) would, again, be a problem. For example,

²⁹"An exchange rate is the price of one currency in terms of another or in terms of gold, the common denominator of currencies. In a market in which trade flows freely and prices and exchange rates are allowed to seek their own levels, the relative prices of two currencies will reflect, roughly, the relative purchasing power of each currency in its own country, particularly of internationally tradeable goods.... It is no exaggeration to say that over the past 30 years the exchange rate of no Western nation has been as far out of line from its equilibrium value as the Soviet ruble exchange rate.... The Soviet exchange rate has typically been so far out of line and controls have operated so successfully, that it seems fair to describe the rate as no more than an accounting device for converting foreign currency prices of Soviet exports and imports into rubles for the purpose of constructing foreign trade accounts in local currency." Franklyn D. Holzman, "Some Financial Aspects of Soviet Trade," in Franklyn D. Holzman, editor, Readings on the Soviet Economy, Rand McNally and Company, Chicago, 1962, pp. 427-428. See also: Alec Nove and Desmond Donnelly, Trade with Communist Countries, The Institute of Economic Affairs, The Macmillan Company, London, 1960. "In the practice of Soviet trade, there is a virtually complete divorce between internal and external prices. This is due partly to the nature of the internal price system, partly to a completely artificial exchange rate, and partly to the trade procedures adopted." With different internal and external price systems, hidden defense expenditures, and an artificial exchange rate, it seems almost impossible to make any valid and worthwhile dollar-ruble comparisons for the purposes of limiting or reducing defense expenditures either through percentage reductions or ceilings implementations.

Soviet output looks considerably smaller in the ruble comparison than in the dollar comparison. A computation made for 1965, for example, showed Soviet GNP as 35 percent as large as American when the comparison was in rubles, and as 57.5 percent as large when the comparison was in dollars.³⁰

Clearly, the difference of 10 to 22 percent in estimating the comparable gross national products of two states is a significant one, and too great to use that tool as a worthwhile measuring device.³¹ Although budgetary restraints as a driving force in maritime arms control considerations have great appeal because of the expected spinoff from these procedures, the means of implementing these limits (be they flat rates or percentages) are difficult to determine and inaccurate at best. Phrases like "the reordering of national priorities," or the "redistribution of expenditures," or the "increased funding of social and people-oriented programs (and the consequent reduced spending in the military-industrial complex arena)," and others, sound as though they are the cures for the ills of the world. But getting at the facts of these budgetary restraints and obtaining the necessary data to make a workable formula is another matter--10 percent of X numbers of rubles

³⁰Robert W. Campbell, The Soviet-Type Economics--Performance and Evolution, Houghton Mifflin Company, Boston, 1974, Third Edition, p. 103.

³¹"Soviet Union Proposes 10% Cut in Arms Budgets by Permanent Members of Security Council," Soviet News, Soviet Embassy London, October 2, 1973, pp. 414-415. A 10 percent reduction of defense budgets has great appeal, but 10 percent of a Soviet budget, whose total is exceedingly difficult to determine with any accuracy and whose estimated total outlays may vary from 10 to 22 percent, is a disturbingly and perhaps fatally vague figure.

is still 10 percent of X. Even if X could be translated into some numerical value, that value is still only marginally useful until it can be compared fairly accurately with the other currencies involved (dollars, pounds, francs, marks, etc.). The use of gold as a standard of measure of other currencies has potential possibilities, but gold prices are fluctuating now and will not stabilize in the foreseeable future.

Linkages Among the Various Methods of Considering Maritime Arms Control

As indicated throughout this chapter, the possible ways of examining and constructing a maritime arms agreement are incredibly complex and varied in nature. Each separate method is fraught with its own weaknesses (and strengths in some cases), and each seems unable to be isolated from the other possible choices. Yet the history of recent maritime arms control attempts indicates that complex or complicated proposals risk failure of one sort or another. (a) If they are too far-reaching, the proposal may tax the political will of the potential signatories to the point where they are afraid to sign because the accord demands too much or guarantees too little to risk giving up any sovereignty. GCD is an example of this. (b) If the draft agreements are so loosely worded as to encourage or admit diverse interpretations (and therefore, actions), those proposals will not provide any real benefits sufficient to insure signing, particularly if they deal with a crucial or sensitive area, for example denuclearization of the Mediterranean. (c) If the accords are too simple, they

will achieve nothing except another agreement. The SALT II has been categorized as this type of agreement. (d) And if these proposals are too restrictive they will be avoided as being unrealistic or unworkable by the various states they are intended to encompass. The Law of the Sea Conference may be in this category.

If, for the sake of argument, a maritime arms control method can be developed and agreed upon by the negotiating participants, then this method must be, for each state, coordinated with that state's other military and national security interests.³² For example, limiting anti-submarine warfare technologies would mean the United States probably could not control the sea lines of communication across the Atlantic in a European theater war with the Warsaw Pact members as adversaries. Lack of this control would mean that NATO plans for surface resupply of Europe from the Western Hemisphere must be rethought. This retardation or perhaps cessation of Europe's replenishment from North America in turn affects the

³²The various methods of constructing a maritime arms agreement discussed here are not unique to the ocean atmosphere. In fact, many of the same formulae have been used in constructing scenarios for central European accords. See J.I. Coffey, "Arms Control and the Military Balance in Europe," Orbis, Vol. 17, No. 1, Spring 1973, pp. 132-154. In this article, the author discusses approaches to mutual force reductions through: manpower on active duty; reserves; combat units; various types of weapons; stationed or indigenous troops; a man/mile formula; and a percentage of stationed and/or indigenous troops. See also: John Yochelson, "MBFR: The Search for an American Approach," Orbis, Vol. 17, No. 1, Spring 1973, pp. 155-175, in which the author examines percentage reductions; types, origins, and readiness of forces; weapons systems; verification procedures; and a re-evaluation of European security needs and desires.

battle plans of the land and air forces within that theater of operations. Another example: banning all aircraft carriers from the Mediterranean (either because they exceed a tonnage limitation, or because they are a certain prohibited ship type, or because their planes are capable of carrying nuclear weapons) would mean these planes (both Navy and Marine Corps in the case of the United States) could not provide tactical support, reconnaissance, or logistical supply for United States and allied ground troops fighting around the littoral of that Sea. Thus, the operational planning of the other services and other nations would have to undergo a fundamental re-examination in light of the absented aircraft.

Modern technologies and rapid communications have made the operational plans of any war situation an integral and interdependent process among land, sea, and air units of weaponry. Soldiers and sailors no longer 'do battle' in vacuums, separated from each other by their different natural elements. They are (generally) planned for, procured, trained, and utilized as part of a whole picture--an overall strategy. Restricting, limiting, or controlling only one aspect of that integrated whole, without examining the impact on the other elements of that whole, will at best critically weaken the rest of the plans, and at worst fatally wound them before they even are tested in battle.

Arms Control versus the Freedom of the Seas

There are others, too, who believe that any maritime agreements which restrict the freedom of the seas are unnatural,

illegal, and unworkable.³³ The oceans belong to no one, and no nation or concert of nations through international accords can limit, restrict, or prohibit the free passage of ships on or through this medium so this line of thinking goes. The vastness of the ocean spaces makes the implementation and enforcement of such regulations exercises in futility, and may actually retard world attempts to manageable arms control agreements because they delude the signatories into believing in unrealistic situations.

The construction of maritime arms control agreements is both difficult and complex. Accords which might have a chance of success must take into account myriad different details, several different methodologies, and numerous diverse impacts, both within the governments involved and on the external relations with other governments. Methods which appear simple on the surface have incredibly complex structures beneath them. Strong proposals are built with fragile and breakable underpinnings. Unrealistic limits or prohibitions are not seriously considered by potential negotiators, and valid proposals require political will and effort to insure their success. Prospects

³³ Conversation with a senior retired Royal Air Force officer in London, Spring 1974 and conversation with a senior retired U.S. naval officer in Washington, Spring 1973. These are opinions generally expressed in private and rarely appear in print, primarily because opposing "arms control" is akin to opposing motherhood and apple pie. Also, arms control agreements are viewed by some as devices used by the Communists to retard or stop Western military advances, while they overtake or surpass the capabilities of the gullable Westerners. These individuals view the Soviet Union as negotiating, signing, and upholding accords only so long as those agreements are in their own best interests. The Communists will break any agreement as soon as it is in their interest to do so.

for any type of substantive agreement are, at best, sometime in the future and dim, at that.

CHAPTER VI

A COSTS VERSUS BENEFITS ANALYSIS OF THESE METHODS OF VIEWING MARITIME ARMS CONTROL

The traditional mode of military analysis, which saw in war a continuation of politics but with its own appropriate means, is no longer applicable. Policy and strategy merge at every point.... Skill in quantitative analysis may downgrade those /qualitative/ factors that cannot be quantified. A complex strategic theory may be so intellectually satisfying that the difficulties of human beings employing it in moments of great tension and confusion may be overlooked. It may be tempting to treat allies as factors of a security arrangement and to forget that their ultimate contribution depends on intangibles of political will.... This is another way of saying that national security policy is not primarily a technical problem, but a challenge to political understanding and, ultimately, to philosophical insight.¹

After examining the various ways or methods of viewing a maritime arms control agreement, one must then consider the types or categories into which these methods may fall. They may be compared by numbers against quality; or by the value of specific weapons systems; or by limitations on the buying power of a state in procuring either the maritime hardware or the people to manipulate those purchases. After categorizing these methods with their liabilities and assets for each type established, they may then be utilized in a maritime arms control formula.

Quantitative versus Qualitative Approaches

The controls or limits or ceilings on the quantity or

¹ Henry A. Kissinger, "Editor's Conclusion," in Henry A. Kissinger, editor, Problems of National Strategy, Praeger Publishers, New York 1965, p. 477.

numbers of maritime entities in an agreement might be reached through several methods. Tonnage ceilings could limit the total numbers of a particular type of ship or boat specified. No signatory, for example, could have more than 1.0 million tons of aircraft carriers, perhaps divided among 13 hulls.² Or, the parties to the accord might agree that none of them would build more than 350,000 tons of cruisers on a maximum of 26 hulls.³ This could be done for each type of combatant, both surface and submarine. Proposals of this nature have already been implemented in the SALT I Agreement, and have been discussed in recent literature as a means of limiting nuclear powered attack submarines. By having a sliding scale of tonnage and numbers, each participant is given some leeway in determining its particular needs, while all states have accepted mutually agreeable limits. In constructing an accord of this type, however, it would seem necessary to agree on tonnage/numbers for each major category of ship, i.e., all aircraft carriers, all other surface combatants (cruisers, destroyers, escorts, frigates, corvettes, etc.), all attack submarines (however powered), all coastal surveillance craft (missile torpedo boats, fast patrol boats, etc.), all amphibious operations ships, and others. If this is not done across the board for all ships, then any signatory could build a larger or smaller variety of

²These very rough figures approximate the coming U.S. carrier strength.

³Very roughly, these are tonnage and numbers totals for the Soviet navy presently.

the limited ship and call it by another name, thus evading the agreement.

Since ships, of whatever variety, must be manned by numbers of personnel, limits in this area might provide a handle for controlling maritime armaments. In this endeavor, the settlement of the definitions of terms becomes all-important, as discussed previously. What makes up manpower, and who are counted in the overall figures? Should only uniformed naval personnel be counted, or all people who receive pay checks from the Department of Defense? If only naval personnel were included, how does one account for the civil service merchant marine, the reserve components, the Coast Guard, the civilian merchant marine (which provides support for the Soviet Navy), and other ancillary elements? In the United States, for example, much of the shore establishment could be civilianized, thus providing more uniformed personnel to man ships at sea. Each ship could have two crews (as do the SLBMs), enabling the hulls to have greater operating time at sea.

Within manpower limits, perhaps an overall limit of all DOD personnel might be possible, providing each state with the freedom to mix its numbers under that ceiling. In this case, one state, for its overall national interest, might prefer to have 50% in ground forces, and 25% each in sea-going forces and air forces. This, of course, does not account for quasi-military functions performed by units not under the defense ministry's control (as the Coast Guard in the United States).

States or countries, or regions within a country could set up local militias or coastal patrols to circumvent the agreements on overall manpower ceilings. On the other hand, the freedom to mix within the total limits might be constructed so as to include such local or regional units as a percentage of the total national military units allowed. For example, no more than 10 percent of a nation's armed forces may be of the local or regional variety or no more than 5 percent of the naval forces may be distributed among or used for coastal defense. Although maintained by the regional governments (as opposed to the federal governments) the local defense groups would be counted in the overall national defense manpower ceilings for the purposes of the accord.

A third quantitative attempt to generate arms agreements is the budgetary ceiling. This method has some problems similar to manpower proposals--what to include and how to count it. Research and development, as in the Soviet case, could be placed in the budgets of other governmental agencies, or farmed out to civilian elements both academic and industrial. The problem of discovering the actual defense budget has also been discussed, as has the problem of accurately discerning the overall budget or the gross national product of a specific state, especially a closed society nation.

Another possibility to be considered for a particular world region would be a percentage limit on ships of non-littoral states in that area. For example, the Soviet Union or the United States could have no more than 10 percent of their

combatant forces in numbers and/or tons and/or manpower in any specified area at any one time. The Mediterranean or the Norwegian-Barents Seas (or the Indian Ocean although that is beyond the NATO area) come to mind. This would in no way limit the total maritime assets of any state, but it would create a measure of constraint in particularly sensitive arenas. This could be accomplished by across-the-board percentage limits with no freedom-to-mix or a gross percentage with complete freedom-to-mix as perceived necessary by each state. This notion has many drawbacks, not the least of which is that it might inspire greater building programs to enable a larger number (although the same total percentage) of ships within a particular region. As with some of the other quantitative schemes, this idea does not examine the asymmetries of ship types and weapons systems aboard those ships, or their diverse missions within a given geographic area.

Limiting the number of ship-days at sea might also be considered a quantitative restraint. For example, in the Norwegian-Barents Sea area the United States and the Soviet Union (or all NATO-WTO) navies except Norway's might be limited to 150 ship-days a year of operating time. Under this procedure, the limits involve a particular area and the number of days ships may operate there. Each ship operating in (as opposed to transiting) the area is a ship-day. The NATO navies, for example might hold one exercise a year in that area with 25

ships involved, but it could only take six days.⁴ The Soviet navy, on the other hand, might prefer shorter exercises with fewer ships held more frequently. The multiple becomes the governing factor, with each ship carrying the same "weight" in the equation.

Qualitative limits, as compared with the quantitative limits discussed above, have some different situations surrounding them.

Sanctuaries allow only certain types of ships in certain areas, but do not limit the numbers of those types of ships. Theoretically, this could make all of a certain type of ship (SLBMs) safe from attack, but by the same token, it might also make them much easier targets to find and eliminate if that became necessary.⁵ Geographic restraints tied up with a quantitative limit might work in certain areas. For example, no aircraft carriers over a certain size or beyond a designated number could sail in the Mediterranean. An area limit of this type could and perhaps should be applied to other combatants within the specified arena. As with the tonnage/numbers

⁴It is realized that these figures may be totally unrealistic and that special provisions must be made for coastal states, but the numbers are used for example purposes only.

⁵For example, one naval officer said recently, that he was not opposed to the Soviets having a naval facility in Cienfuegos, Cuba, because it was much easier to destroy all their ships (surface and submarine) at one time rather than running all over the Atlantic looking for them. This statement presupposes a surprise strike by the U.S. and a Soviet Navy with all its ships in port at the same time--an unlikely occurrence. It also may mean that the USN finds it easier to track and keep up with Soviet ships in Western Atlantic waters if they come from Cuba, than if they travel down from the North Atlantic.

ceilings discussed before, these restrictions could be on a sliding scale to include types and numbers.

In this case, each non-littoral signatory would be allowed a total of 75 naval and support vessels in the Mediterranean at any one time. Within that number, each could have no more than two aircraft carriers, ten cruisers, 25 destroyers, escorts, frigates, or corvettes, 20 smaller combatants (patrol boats, missile boats, torpedo boats, etc.), 10 amphibious ships, and eight support or supply ships unless otherwise recompensed. Each ship would have a numerical value of the next category so there could be some freedom to mix, thus creating individually suitable fleets. For example, an aircraft carrier could be equal to five cruisers. A cruiser could be equal to three destroyer-type ships, and an amphibious ship could be equal to two destroyers, or some similar ratio. Each state could tailor, within limits, its navy to its perceived needs within a specific geographic area, but not limit its total armed forces or even its total navy.⁶ Qualitative limits would by this method exist in a certain area.

Qualitative restrictions by weapons systems have already been discussed, such as no nuclear weapons in the Mediterranean. This proposal is too simple, however, and does not address the questions of nuclear-powered ships or nuclear capable weapons (those weapons conventionally armed but capable of nuclear tips). Even the limitation of certain weapons systems (as opposed to their prohibition) seems difficult to define and

⁶I owe this point to LT Robert W. Stuart, USN, Fletcher School of Law and Diplomacy, Fall 1974.

even harder to agree to among the parties because of the almost infinite varieties and mixes of systems. Some of these have been discussed earlier, but does a cruise missile on a destroyer equal the same cruise missile system on a cruiser? Does an ASW helicopter on a carrier have the same "value" or weapons system "weight" as the same ASW helicopter on a guided missile cruiser? Different ships have different missions and, therefore, have different weapons systems. But the same weapons system may have alternative functions aboard the same or different ships. It would seem, then, that a constraint of some sort on a specific weapons system without any combination of area or ship-type or numbers, would become merely a limit or prohibition for its own sake, not for any tension-reducing value that an agreement should or might have.

Short and Long Term Controls

Another perspective on these much-discussed problems is that of the duration of the effect of the control or limit or reduction. In other words, if a state initially agreeing to some form of arms control measure determined, at some point, that the accord was not to be continued, how long would it take that state to recover from the restraints of that agreement? If country A decided that the accord between A and B (or among A through F) no longer served A's national interest because B was not abiding by the tenets of the agreement, in what time frame could A regain or recover its former newly determined maritime strength necessary to compensate for B's gains? Generally, the time needed to recover or reach the determined

strength can be divided into short term and long term periods depending upon the type of agreement.

Short term controls, those from which recovery is quick, fall into the category of operational or geographic limits. A signatory does not (necessarily) reduce or limit its assets, it merely agrees not to use them in certain ways, or in certain areas, or more than certain periods of time. Recovery from these limits is quick and relatively easy, taking only a matter of hours or days. In this case the forces exist and need only to be shifted from one area to another, depending on the situation.

Long term controls, on the other hand, have extended recovery periods and may be categorized as hardware or military assets controls. These encompass such concepts as numerical limits on types of ships, numbers of personnel, and dollars spent on these assets. Recovery from these controls is measured in months or years. The period involved cannot be shortened by any substantial amount because building or refurbishing weapons from scratch or from a mothballed inventory takes time, as does training of personnel. The sudden need to build (or otherwise place into the active inventory) three attack submarines, or one cruiser, or a squadron of fighter aircraft, or train 10,000 more personnel cannot be met quickly or easily. Requirements of this type can be fulfilled only over long periods of time and with substantial expenditures of funds.

Although arms control agreements should be entered into by the various signatories in good faith, it would seem prudent,

and perhaps necessary considering historical indications, to examine and take into account the recovery time involved in any sort of accord. Consideration of the needed recovery time, on the other hand, may demonstrate a lack of faith or even bad faith on the part of the negotiators and may cause ill will (either real or perceived) among the participants. Nevertheless, it is a factor which must be recognized and should be considered in any arms negotiations culminating in any sorts of limits, restraints, or controls.

Verification of Various Methods of Limits, Ceilings, or Reductions

In any arms negotiations involving constraints of any sort, the ability of the signatories to assure themselves of others' compliance with the specifics of the accords is important to the usefulness and duration of the agreement. If one state cannot reasonably assure itself that the stipulations to which all agreed will also be adhered to by all so agreeing, then there is little motivation to make an accord in the first place.⁷ Verification, then, is the ability to confirm that the other parties to the agreement are in fact doing what they agreed to do, or, conversely, not doing what they agreed not to do. Since on-sight inspections are unacceptable to most governments because they threaten or perhaps in fact dilute the

⁷There are many parts of the state which must be reasonably assured of the veracity and thoroughness of the verification procedures. The military and civilian leaders of the executive branch, the legislators, and the general populace must have a sufficient degree of faith in the system to accept it in the first place and to abide by it for the duration of the accord.

recipients' national sovereignty, and since no agreements on an international entity capable of carrying out these tasks seem forthcoming in the near future for the same reason, then "national means of verification" appear to be the logical alternative to this problem. National means, however, are not foolproof and are not even available in many areas of potential arms control agreements.

Accurate substantiation of budgetary limitations, reductions, or percentages spent on defense matters would be difficult in almost any state and almost impossible in a closed society such as the Soviet Union (see Chapter V). Manpower constraints have almost the same degree of difficulty of verification because of the varieties of manpower available and the need to determine the utilization of the various categories into which they are divided. Without on-sight inspection it is hard to determine the readiness of a reserve unit, its quality and quantity of equipment, and its utility in the immediate situation.⁸ Prohibitions against certain types of weapons are equally difficult to confirm. As the Japanese discovered recently, the statements of another country may not always be accurate. Other than inspecting every compartment and space in a ship or aircraft, one cannot be positive that no nuclear weapons are carried aboard. And one inspection will not suffice--it must be repeated periodically to insure com-

⁸It is sometimes equally difficult to make that assessment with an on-sight inspection but that is a different problem all together.

numbers and/or types of ships are more susceptible to negotiation and agreement. For example, one of the fundamental parts of the SALT I Interim Agreement¹⁰ on ballistic missile submarine numbers limits revolves around the ability of each side to verify through national means the numbers being built by the other side. The Agreement even specifies the use of national technical verification procedures and prohibits actions which could be taken to confound, confuse, or impede these procedures. It seems now that this portion of the Agreement is in some jeopardy and may call into question the

¹⁰ See: "The Soviet-American Summit, May 1972, Interim Agreement and Protocol on Strategic Offensive Missiles of 26 May 1972," in Survival, Vol. 14, No. 4, July/August 1972, pp. 195-196. "Article V 1. For the purpose of providing assurances of compliance with the provisions of this interim agreement, each party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law. 2. Each party undertakes not to interfere with the national technical means of verification of the other party operating in accordance with paragraph 1 of this article. 3. Each party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of the interim agreement. This obligation shall not require changes in current construction, assembly, conversion or overhaul practices," p. 195.

basis of the whole series of accords.¹¹

This present problem aside, confirmation of things which can be seen and verified by a satellite (or other electronic means) seems the most hopeful in the field of substantiating what the other state says. Satellite photography can be used to inspect areas of the ocean set aside as either sanctuaries for only certain varieties of ships or geographic areas from which specific types of ships are excluded. This, of course, is more feasible presently for surface vessels rather than submarines, but other types of electronic inspections may be feasible in the near future to accommodate agreements on areas

¹¹John W. Finney, "Questions Arise on Soviet Arms," The New York Times, November 6, 1974, p. 9. "Defense Department officials say they believe that recent Soviet actions raise questions whether Moscow is camouflaging some of its strategic weapons programs in violation of the 1972 agreement.... One apparent act of concealment described by both Pentagon officials and /Senator James L./ Buckley aides was a recent placement of canvas covers over construction ways at a shipyard near Murmansk where nuclear-powered missile-carrying submarines are constructed. As a result, according to a Buckley aide, the United States has been unable to determine for about six months how many Yankee and Delta class submarines are under construction by the Soviet Union. In addition...there are indications that the Soviet Union, through various counter-measures, is attempting to frustrate electronic methods used by the United States. Electronic intelligence surveillance is of particular importance in monitoring Soviet missile programs during the development phase while photographic intelligence through reconnaissance satellites is used to keep track of the missiles once deployed," p. 9.

of the oceans involving submarines.¹²

Tonnage constraints cannot be ascertained exactly by national means of verification, but can be examined with enough accuracy to make them acceptable on the ground that they are verifiable. It would seem, however, that the use of tonnage limits alone have been dismissed already as a worthwhile arms control method because they are no longer an accurate measure of ship strength or degree of lethality as discussed earlier. Tonnage combined with some other factor or factors, however, may still have utility in arms control.

National technical means of verification, then, are best able to substantiate another's claims in the hardware and geographic areas, i.e., in the categories of things that can be seen by satellite photography. Substantiation of the claims of another party to an arms agreement are least susceptible to verification in the qualitative and non-photographable areas, such as nuclear-tipped weapons, manpower or budgetary restraints, and for the present, undersea sanctuaries. Since verification is an integral part of the acceptance of any arms restraints, it would seem that arms control negotiators would be

¹²See: Greenwood, "Reconnaissance, Surveillance and Arms Control," pp. 4-8 for discussions of visible light sensors, infra-red sensors, radar, X-ray and gamma-ray sensors. See: Robert Barkan, "Laser for War," Survival, Vol. 14, No. 5, September/October 1972, pp. 239-241, for a brief discussion of lasers. See also: Bernard T. Feld and George W. Rathjens, "ASW, Arms Control and the Sea-Based Deterrent," in Kosta Tsipis, Anne H. Gahn, Bernard T. Feld, editors, The Future of the Sea-Based Deterrent, The MIT Press, Cambridge, 1973, pp. 121-147. These authors conclude, "In summary, the prospects of limits on naval operations that could serve to prevent erosion in confidence in the viability of submarine launched missile systems is not good," p. 140.

more interested in agreements involving various aspects of hardware. This hardware may be constrained in its numbers or in its geographic distribution, either by specific prohibitions or by limited operations in certain areas of the oceans and seas.

Hardware limits which involve prohibitions on building, however, are the same constraints from which it is most difficult for a state to recover, should that become necessary.¹³ This, in turn, makes these types of accords less desirable over the long term than their ease of verification might initially suggest. The negotiators, or rather the national governments, must then decide, in talking about maritime arms control with others what is more important--verification of an agreement reached or potential get-well time needed to recover from the strictures of that same accord, should the latter be deemed necessary for the security of that state.

What to Include in a Maritime Arms Control Formula

If, as indicated in the Introduction to this discussion, rising costs of seagoing armed forces (ship platforms, weapons, manpower, and the support attached thereto) make mutual arms control considerations more desirable, at least in the Western world, then the problems outlined here should be considered

¹³Feld and Rathjens, "ASW, Arms Control and the Sea-Based Deterrent," discuss verification for two types of violations. (a) These violations or abrogations of strategic agreements which would take months or years to overcome: "these will generally relate to development and/or construction of new systems." (b) Violations or abrogations with felt significance measured in hours or days: "these will generally relate to limitations on operations or deployment...." p. 140.

prior to any attempts at negotiations.

If national means of verification through the use of satellites of any accord is not of immediate and/or continuing importance, then agreements limiting such things as manpower authorizations or budgetary expenditures on defense (either maritime or overall armed forces) could be considered as having the greatest impact on the economies of the states involved. Constraints in these areas, set at present or lower mutually acceptable levels, would provide a reduced percentage of gross national product devoted to defense measures. This would turn money, and perhaps manpower, to other aspects of the economy, enabling the national governments to expend greater efforts on other measures important to the health and well-being of the populace. Other maritime arms control considerations, such as submarine sanctuaries or geographic limitations, could also be considered if continuing national confirmation is not of utmost importance. While these measures might not have much deflating impact on the defense budgets of the states involved, they might have a tension-reducing effect among the participants.

Accords based on any of these formulae for considering maritime arms restraints must assume a high degree of honor and integrity on the parts of the signatories to the agreements. Since on-sight inspection by an international or multi-national entity does not seem a possibility in the foreseeable future, and national means of substantiation are not suitable to these types of agreements, then the word of the individual states

becomes the only available method of insuring compliance with any accords. Long-term governmental commitment to international agreements in the maritime atmosphere has been spotty at best, especially in those treaties which required substantial self-discipline and control, that is, those areas requiring states to stop doing things which they had been doing either intermittently or for a period of time. (Naval "holidays," scrapping of ships, nuclear free zones, Law of the Sea constraints proposals all involve the cessation or reduction of some activity already extant.) Governmental commitment (honor and integrity as exhibited by continued abidance with the accords) to other forms of agreements which limit or prohibit actions not yet taken have a somewhat better reputation as exemplified by the Antarctic and Outerspace Treaties. Recent history of the maritime arms control attempts, however, indicates few successful agreements involving substantial governmental commitment over a long period of time, except to those things which they were not seriously considering doing in any event.

If one assumes, on the other hand, that verification by national means is a not unimportant aspect of maritime arms control considerations, then one's options are somewhat different in constructing feasible formulae for discussions with others. Satellite substantiation of the state's commitment to an accord is limited to those things which can be photographed with some degree of ease, namely numbers and types of ships, and various parts of the oceans and seas surfaces. The

construction of ships, if built as outlined in the SALT I Interim Agreement, are detectable and identifiable by national means of verification. Long before they are completed and ready for sea, satellite photography (and other sources of intelligence) can observe these ships, as well as indicate their type and general mission. This early detection by other parties to an accord can either, (a) insure compliance with the specifics of the accord or, (b) notify all concerned that one of the signatories is not abiding by the letter of the agreement. If the latter is true, then the other participants can take whatever action they deem appropriate to rectify the situation. More important to this discussion is the early detection and the consequent lead time it provides to the others in determining what actions (if any) to take.

Although national means of verification provide a long lead-time (compared to no lead-time at all if other participants in the agreement are confronted with the results at sea in defiance of the accord), the longer time is necessary not only for greater decision-making latitude, but also for greater recovery time needed if any or all of the other signatories decide to commence their own construction programs to match that of the abrogator of the accord.

The same satellite operations can detect surface ships (weather permitting) which contravene sanctuaries or areas of geographic restraints. These facts can be reported to the other participants for their information and use in any decision to act. In this case the reporting of a violation of an accord is after the fact and thus does not provide a long time

to decide what actions if any to take. By the same token, the recovery time needed to meet this new situation is much shorter, assuming that the decision to recover is made. For example, if the Mediterranean Sea were the arena for an agreement barring more than one aircraft carrier and X numbers of other ships, and the United States put another carrier into the area, the Soviet Union could match that situation from the Black Sea Fleet in short order. Similarly, if the Soviets put too large a task force into the Norwegian Sea (beyond mutually agreed upon numbers and/or types of surface ships) the NATO navies could respond relatively quickly, either by sending in ships of their own or requesting that the Soviets vacate the area.

The ability to verify nationally whether another party is complying with half of the bargain does not automatically insure his compliance with that agreement, but it does help to keep the aggrieved party from being caught totally unaware of the abrogation of the accord. If country A really wishes to defy the agreement, country B's ability to detect those steps will not deter A from violating the agreement. National means of verification will not stop any actions necessarily, they will merely provide earlier knowledge of those negative actions by country A. National technical means provide a greater recovery time for those signatories against whom the action is taken.

It would seem, then, that in evolving any formula for maritime arms control considerations, national means of verification must play an important role. This in turn somewhat limits the area which can be discussed to those that can be

verified--some hardware (both numbers and ship types) and geographic areas. Once this decision is made, one must then consider the complexities of long and/or short term recovery times involved if the agreement is abrogated or otherwise defied by any participant. Subsumed under this problem is the consideration as to whether or not recovery time is necessary to handle the altered situation. If any of the other signatories determines that it can manage with its forces in being, then recovery time diminishes in importance. If, however, recovery time is needed to build, re-commission, or refurbish ships, or train more personnel sufficient to meet the new circumstances, then recovery time is an important ingredient in making a formula. The decision about the importance of the recovery time will broaden or narrow the scope of those methods to be considered.

If, given the other factors mentioned here, recovery time is deemed unimportant because a state has decided to handle any new situations with its forces in being, then the range of considerations would include hardware and weapons systems. If on the other hand, recovery time is deemed of great value because ship construction or personnel training would be needed to meet a suddenly altered situation, then geographic restraints seem to be the best area of considerations. This method of maritime arms control does not require any real reductions or limitations of forces, merely their absence from certain areas (or their operations only in certain regions). A breaking of this agreement and the subsequent imbalance of forces in that region could be re-balanced fairly easily and quickly with

standing forces. The requirement for new forces not already in being to rectify the imbalance, however, presents an altered situation as discussed earlier.

Discussion of hardware constraints involves the question of whether or not these should include numbers or ship type or both. A combination of the two appears the optimum choice because of the asymmetries of navies and their mission.¹⁴ No two of the navies of any countries discussed in this paper are the same, nor do they have like missions. It would seem, therefore, that some form of sliding scale of numbers and ship types would be needed for most of the categories of ships involved. (This might not apply to ships with similar missions and built not unlike each other, such as nuclear-powered attack submarines armed with torpedoes and cruise missiles; but presently, even nuclear-powered attack submarines are not all armed with cruise missiles, so exact one-on-one comparisons are extremely limited.) Limits or reductions in these areas could have a result of steadying or even shrinking the size of the dollar and manpower expenditures, a not unpleasant side effect. These constraints could also be tied into an ocean region, thus combining the two into some form of regional maritime arms

¹⁴Like tonnage alone, ship-types alone and numbers alone, are not valuable measures of maritime assets. Ship-types can be created out of whole cloth, such as the surface effects ship of the U.S. Navy, the through-deck cruiser of the Royal Navy, the small, nuclear-powered carrier of the French Navy, or the VTOL carrier of the Soviet Navy. Numbers can be made passee by (1) larger, more lethal platforms and/or weapons systems, or (2) creation of new types (unless overall numbers are limited in which case size becomes the method of circumventing this stricture).

control consideration. This might also have the effect of reducing tensions at least locally.

Geographic restraints (or sanctuaries) by themselves would not necessarily reduce the financial commitments in the defense of any signatory country, but they could reduce the tension and fear of hostilities in the local area. They might, on the other hand, generate local rivalries if only the superpowers were involved in such an agreement, but this will be covered in Chapter VII.

An arms control formula for maritime assets should include those things which can be verified by national means. Consider for inclusions those methods which have shorter get-well times if that is important. Include those items requiring a longer recovery time if the potential change in the situation can be managed by forces in being. And, finally, include those assets which were probably going to be limited by unilateral action if no agreement were made.

CHAPTER VII

CONCLUSIONS AND FINAL COMMENTS ON FUTURE MARITIME ARMS CONTROL CONSIDERATIONS

It has been argued that the great danger in the process by which arms limitations agreements have been reached in the past, as witnessed by the naval treaties between the wars, is that they have established a system so rigid that its breakdown was inevitable once that rigidity was challenged by would be new entrants to the system.... What is needed instead is the constant exchange of estimates of security, together with the frank understanding of each participant's perceptions of threats to that security.¹

Although the Civil Service Commission has not yet developed a job description for the "Maritime Arms Control Crier,"² current literature of the academic and other scholarly variety³ is discussing the possible dimensions of such considerations. It is assumed that it is only a matter of time before the various governments of the North Atlantic Alliance

¹Donald Watt, "Historical Light on S.A.L.T.--Parallels with Inter-War Naval Arms Control," The Round Table, No. 245, January 1972, p. 35.

²GS2, high school education, to roam the corridors of the Executive Branches of the government in Washington, D.C. ringing a hand-held dinner bell, calling to all and sundry, "Naval arms control is coming, naval arms control is coming." Must be at least 18 years of age, physically fit, with strong vocal abilities, a U.S. citizen (with acceptable security clearances), and capable of understanding and utilizing both the District of Columbia metropolitan transportation system and the multiplicity of federal office buildings and complexes within the District, Maryland, and Virginia.

³See "Conclusions," The Defense Monitors, Vol. 3, No. 3, April 1974, p. 11. "There is an urgent requirement for the United States and the Soviet Union to have overall discussions about the general naval arms race between them (NALT talks). /sic/. This ongoing naval arms race may be more expensive than the strategic arms race. It is certainly more likely to lead to wars," p. 11.

and/or the Warsaw Treaty Organization begin to examine these notions (or some offshoot of them) seriously with a view toward attempts at maritime arms agreements. In the case of the United States, and to a lesser extent the Soviet Union, the question of the number of participants becomes important immediately.

Bi-Lateral or Multi-Lateral Negotiations

If, as has been indicated earlier, the future holds the possibility and probability of maritime arms negotiations for at least the United States and the Soviet Union, what procedure should these two powers follow? Should they conduct bi-lateral discussions similar to (or perhaps as a part of) the Strategic Arms Limitation Talks? Or should these conversations and any ensuing discussions take place in a multi-lateral forum similar to the mutual force reduction meetings? In this essay, no great distinctions have been made between strategic (or nuclear) and conventional (or non-nuclear equipped) naval weapons systems. Rather, they both have been examined as related parts of the ocean element of national security. Of course, weapons systems and/or platforms may (and in some cases do) fall into only one category or another, but, depending on the task and mission prescribed, they may belong to both categories. It does not seem worthwhile at this juncture, then, to predetermine which of these two types of forums should be used. Instead, the forum should develop from the subject matter and the participants.

Since the geographic areas of NATO are those forming the limits of this arms control examination, it follows that a

NATO perspective should not be ignored in any discussions. If the parallels of the mutual force reduction talks are followed, then the North Atlantic allies and the WTO members involved in the potential results of any talks should also be discussants at the meetings. This presents some very complicated problems if geographic areas are to be examined. In the Mediterranean, the Soviet Union, the United States, Great Britain (Malta, Gibraltar, and Cyprus), Italy, France, Greece, and Turkey (coastal states), all have legitimate interests. Should they all be involved in what perhaps should be essentially a bi-lateral negotiation between the first two states mentioned, neither of which is a littoral state? Soviet proposals for the "de-nuclearization" of the Mediterranean (Chapter III) have been put forth as starting points for negotiations. Logically these discussions, should they ever take place, should involve only the United States and the Soviet Union because neither of them has coastal interests in the Mediterranean, and they are both interested in reducing the other's presence in that Sea.

For the United States, however, treaty commitments to NATO and political commitments to Israel, prevent her from considering this arena in a purely bi-lateral context. By the same token, those North Atlantic Alliance members having vested interests in the Mediterranean are faced with an "approach-avoidance" conflict. They, because they rely at least to some extent on the security provided by the Sixth Fleet's presence in the Mediterranean, would want to present at least a private opinion on any negotiating stance taken by the United States.

At the same time, they would not want any limits or restraints placed on their maritime efforts in that Sea because: (a) they (except for Great Britain) are littoral states and consider the Mediterranean "home waters"; and (b) they would view a bi-lateral negotiation which also limited them without their obtaining any equivalent exchange restraint from the WTO as inequitable.⁴ Unless mutually acceptable restraints or limits (either maritime or land-based) could be negotiated as part of a multi-lateral Mediterranean discussion, it would seem that the NATO allies could be doubly hurt by a United States constraint of some sort and by controls placed on themselves; both of these for only restraints on the Soviet maritime forces in that area.

A bi-lateral ocean arms accord with or without NATO input to United States positions might lead to any one of three reactions among the other Western European states in the Mediterranean. They could still perceive a Soviet threat potential sufficient to warrant increased local naval forces created

⁴For interesting parallels to this situation see, "The Soviet-American Summit, May 1972--Agreed Interpretations, Common Understanding and Unilateral Agreements," Survival, Vol. 14, No. 4, July/August 1972, pp. 196-199. In their only unilateral statement the Soviet Union declared, "Taking into account that modern ballistic missile submarines are presently in the possession of not only the U.S., but also of its NATO allies, the Soviet Union agrees that for the period of effectiveness of the interim 'freeze' agreement the U.S. and its NATO allies have up to 50 such submarines.... However, if... U.S. allies in NATO should increase the number of their modern submarines...the Soviet Union will have the right to a corresponding increase in the number of its submarines," p. 199. Also Richard Burt, "SALT II and Offensive Force Levels," Orbis, Vol. 18, No. 2, Summer 1974, pp. 465-481, see the footnote p. 467. "According to Michel Tatu's article published in Le Monde (January 18, 1974), the Soviet at the second round of SALT have also demanded that the Chinese nuclear forces be added to the U.S. offensive weapons total."

jointly from a European naval force.⁵ On the other hand, a felt need for greater protection by the interested Western Europeans might not manifest itself in a cooperative effort, but rather in local rivalries and increased building programs developed on a national basis only. This could result in duplication of efforts, excessive defense expenditures, and a possible further disintegration of NATO cohesion in the area. A third, and no less unpleasant possibility stemming from bi-laterally negotiated constraints, could be the development of a sense of hopelessness on the part of the Western Europeans. They might feel there was nothing they could accomplish without the full (present) strength of the Sixth Fleet against any Soviet naval pressure in the area and therefore, they would come to adopt a defeatist attitude. Any moves by the Soviet Union (short of shooting incidents) would be protested verbally, but no substantial naval forces would be available to back up the diplomatic resolve. A possible solution to this problem, should the United States negotiate any sort of bi-lateral limits, could lie in the Mediterranean equivalent to the Standing Naval Force Atlantic. Presently there is Naval On-Call Force Mediterranean consisting of one or two ships each from

⁵See: Wolfgang Hager, "The Mediterranean: A European Mare Nostrum?," Orbis, Vol. 18, No. 1, Spring 1974, pp. 231-251, especially pp. 248-249, in which he says that a purely European naval force would demonstrate to the Americans "that the Europeans were playing their part" including increased French participation. According to the author, however, a large European surface fleet could place the Soviets in the role of underdog in the area, protecting the Arab world from the potential "imperialist" intentions of the Europeans. He prefers common surveillance and electronic networks, shore-based naval missiles, and increased aircraft reconnaissance.

the United States, Greece, Turkey, Great Britain, and Italy exercising and operating together on an infrequent periodic basis.⁶ If this task force were to become active full time, it could have a synergistic effect politically on the Soviet Union as well as providing NATO with another, much needed, area of co-operation and effective mutual defense. This would enable the United States to consider some reductions in that area without significantly degrading NATO defenses in the Mediterranean. It would not, however, help the United States meet its avowed commitment to Israel because the other NATO allies have made it clear they do not want to become militarily involved in the Middle East hostilities, either directly or indirectly.

Geographic restraints in other places, such as the Atlantic or the Norwegian-Barents Sea areas have different, if similarly difficult problems. The Atlantic Ocean is too large and serves too many purposes to be the arena for a single, all-embracing arms negotiation of any sort. Any negotiations covering any regions of the North Atlantic could not, in all probability, be conducted on a bi-lateral basis because the maritime forces of Canada, Great Britain, the Federal Republic of Germany (increasingly so), Belgium, the Netherlands, France, and Portugal all ply these waters. If the Soviet SALT Interim Agreement unilateral statement is any indication, they will not accept bi-lateral accords unless they also involve the naval assets

⁶It averages about one time a year of active operations and exercises. Hager, "The Mediterranean: A European Mare Nostrum?," footnote, p. 248.

of the other NATO allies, and the other allies would not accept bi-laterally negotiated agreements constraining their forces in any way. Any discussions along these lines would have to include all the potentially affected parties, as is the case of the mutual force reduction talks.

Geographic restrictions of the mileage variety (no ship closer than X numbers of miles to another's shore) would have to be done on a bloc-to-bloc basis to retain the integrity of the Standing Naval Force Atlantic specifically and NATO naval cooperation in general. Restraints involving all foreign ships would be unacceptable to NATO and probably equally so to the WTO allies. It also ignores the rights of the navies of other nations not a party to any accord and seems too complicated and unrealistic to pursue farther.

Sanctuaries within regions of the Atlantic Ocean especially as they pertain to ship types of the NATO and WTO navies have greater possibilities at least from the standpoint of feasibility of negotiation. If they centered around nuclear powered missile-launching submarines logically the four nations so equipped should participate. The could also apply to such other ship-types as aircraft carriers and attack submarines. Multi-lateral negotiations with the United States, Great Britain, France and the Soviet Union might be manageable from the numbers of participants, but the same problem as that of Mediterranean discussion arises--too much quid from NATO and not enough quo from the Soviets. Sanctuaries, say for SLBM submarines, negotiated between the United States and the Soviet

Union only could not account for third-country intrusion and, although this has been dismissed as unimportant by some,⁷ it could cause severe problems to either or both sides. It would seem that an agreement of this sort, that is, one that has a high degree of risk involving forces beyond the control of the signatory powers, could increase rather than decrease tensions between the two sides. It might also end up costing more than it might save in defense expenditures.⁸ An arms agreement which increased tensions and costs would seem to be detrimental to the welfare and national interests of all concerned.

The third area of possible negotiation involving maritime assets is the Norwegian-Barents Sea arena. As indicated

⁷Richard L. Garwin, "The Interaction of Anti-Submarine Warfare and the Submarine-Based Deterrent," in Kosta Sipis, Anne H. Cahn, and Bernard T. Feld, editors, The Future of the Sea-Based Deterrent, The MIT Press, Cambridge, 1973, pp. 87-126. He writes about sanctuary operating areas for SLBMs and safe passage for SLBMs along "designated deployment routes" to enhance stability, pp. 116-117. But see also Bernard T. Feld and George W. Rathjens, "ASW Arms Control and the Sea-Based Deterrent," in The Future of the Sea-Based Deterrent, pp. 121-147 in which they cast doubt on the worth of SLBM sanctuaries, but consider sanctuaries for surface ships as a possibility. They conclude, "However, there is little basis for believing that the world community would accept or honor permanent open ocean sanctuaries on which the U.S. and the Soviet Union might agree," p. 139.

⁸Dominic A. Paolucci, "The Realities of Arms Limitations," Naval Review 1972, U.S. Naval Institute Proceedings, Vol. 98, No. 831, May 1972, pp. 178-189. "... (T)he more limiting the arms control agreement, the more costly surveillance will be, and the more important the surveillance will become. ... In summary, if each nation has more than enough strategic forces (more costly), each can feel more secure against cheating by the other side and therefore less surveillance and research is needed (less costly)," pp. 180-181. He states that worries about cheating could actually increase each side's feelings of tension and therefore heighten the chances of misinterpretations of the other's unexplained activities, p. 181. In this case, the increased chances of misinterpretations could be caused either accidentally or deliberately by a third party.

earlier, this area is of particular concern to Norway and now to Great Britain and the North Sea littoral states because of the extensive petroleum and natural gas fields being explored and/or exploited in these three seas. Because the Soviet Union has to enter into negotiations with Norway about the seabed surrounding Spitsbergen,⁹ it would not seem as though she would be interested in pursuing other discussions, either bilateral or multi-lateral, concerning these areas at this time. Aside from the potential oil problem surrounding Spitsbergen, the NATO Allies have to consider the need to protect their oil and natural gas fields in the Norwegian and North Seas. These needs might make them reluctant to open any discussions on maritime arms control in a geographic context in these areas. Lastly, the Soviets, despite the results of the negotiations on Spitsbergen, may be reluctant to consider maritime arms restraints in the Norwegian-Barents Seas area because these are the only egress routes for their Northern Fleet based at Murmansk. They may not be desirous of entertaining any proposals which might limit, restrict, or restrain their freedom of passage through these waters. Some say their newly tested

⁹David Binder, "Norway Rebuffs U.S. on Oil Panel," The New York Times, November 13, 1974, p. 9. "Norway ha(s)... more than 600 million tons of oil reserves on her continental shelf, reaching far into the North Sea." See also, Terry Robards, "Norwegians See Threat to Isles," The New York Times, November 26, 1974, p. 9.

5000 mile submarine launched missile¹⁰ makes their need to traverse these waters into the North Atlantic less acute, but others argue that submarines firing from their own piers make excellent targets for a United States second strike. Thus, the need to get into deep ocean waters has probably been decreased only marginally. They would not be looking for an accord retarding that right of freedom of navigation in any way.¹¹

One last area of minor consideration under the geographic heading of arms agreements is the Baltic Sea. Any accord formed would probably require the transfer of large numbers of the Soviet fleet from the area, and thus seems an unlikely prospect. A cosmetic agreement to make it a "nuclear-free" zone of some sort might be negotiated, but it would be nothing

¹⁰"Elsewhere in the News-International," The Boston Globe, October 4, 1974, p. 2. The Pentagon reported that the Soviet Union test fired two submarine-launched missiles. "It was believed to have been the first test of submarine-launched SN8 missiles.... [They] traveled almost 5000 miles from the Barents Sea to about north of Midway Island."

¹¹It is interesting to note that the Soviet Union at the Law of the Sea Conference has supported the principles of freedom of navigation on the high seas, a 12 mile territorial sea (as opposed to 100-200 territorial seas sought by some third world nations), and freedom of transit for international straits. Despite her ideology, the Soviet Union has sided almost consistently with the developed, capitalistic states on these freedoms of movement for naval, commercial cargo, and fishing vessels.

more than a "confidence-building" measure, if that.¹²

In either a bi-lateral or multi-lateral context considering maritime arms controls, one can envisage attempts by either side to link geographic discussions of areas within NATO to areas outside of the North Atlantic Alliance. For example, talks about superpower naval limits in the Indian Ocean could be linked to similar or equivalent controls in the Mediterranean.¹³ Discussions on Baltic Sea limitations might be tied to considerations of Caribbean arms restraints. In other words, the Baltic is strategically important to the Soviets, while the Caribbean is equally so to the United States. Both have naval installations in their respective seas and both wish to deny, as much as possible, access to those areas by the

¹²Confidence building measures have "limited significance for disarmament. They refer to political decisions concerning certain military matters which only marginally affect the military strength of the country concerned but which tend to improve the political atmosphere and confidence in general," p. 106 of Chapter 4, "Security in Europe Through Disarmament and Related Measures," World Armaments and Disarmament--SIPRI Yearbook 1973, Stockholm International Peace Research Institute, Almqvist and Wiksell, Stockholm, 1973.

¹³"The Suez Canal and International Stability," Press release from Senator Henry M. Jackson, dated March 8, 1974, 6 pages. "I believe the Administration should now insist that the Suez Canal be closed to warships of all outside powers including naval vessels of the United States and the Soviet Union." And, "The principal, and rapidly growing, Soviet military fleet is deployed in the Black Sea where it is supported by the industrial and military resources of European Russia. ...In the event of a crisis in the /Persian/ Gulf...the very considerable navy that the Soviet Union keeps on station in the Mediterranean could be quickly redeployed in the Gulf, while the Black Sea Fleet could be sent south into the Mediterranean. ...We, for our part, cannot expect to make comparable use of the Canal" because the to-station time is much greater from the U.S. east coast, and many U.S. aircraft carriers cannot transit the canal because of their large size, pp. 1 and 2.

other side.¹⁴

The United States contributes about one fifth to one quarter of the NATO seapower,¹⁵ while the Soviet Union overwhelmingly dominates the maritime assets of the Warsaw Pact. It would seem then, that multi-lateral negotiations would be disadvantageous to the North Atlantic Alliance members, but most desirable from the Soviet perspective. By discussing restraints covering all the Western navies (and other maritime assets), the Soviets could obtain concessions of great advantage to the East while giving up little of their own. In either a numbers cut or a percentage-of-ships reduction either by type or across the board the WTO would have an advantage

¹⁴See Barry M. Blechman and Stephanie E. Levinson, U.S. Policy and Soviet Subs," The New York Times, op-ed, 22 October 1974, p. 41. Despite the 1970 agreement on Soviet submarines in Cuba (between the U.S. and the U.S.S.R.) recent reports indicate the following has happened since then: the Soviets have "put a nuclear-powered attack submarine into Cienfuegos with a tender, put a nuclear-powered tactical missile submarine into Cienfuegos with a tender, put a diesel-powered strategic missile submarine into a different Cuban port quietly, and put a diesel-powered strategic missile submarine into a different Cuban port publicly. .../I/t seems clear that the Soviet Union is gradually but deliberately encroaching upon the agreement. ...In effect, the submarine visits provide a test of United States willingness to take risks in its broad relations with the Soviet Union in order to prevent a shift in the two sides' relative military capabilities. ...Thus, the series of submarine visits to Cuba poses a political challenge for United States foreign policy. ...Only by demonstrating a willingness to make issues of single events that in isolation appear relatively insignificant can the United States cause the Soviet Union to understand that normalizing our relations requires mutual concessions."

¹⁵Kenneth Rush, William J. Casey, and Donald Rumsfeld, "Department Opposes Proposals for Unilateral Reduction of U.S. Troop Levels in Europe," The Department of State Bulletin, U.S. Government Printing Office, Washington, D.C., August 6, 1973, pp. 209-228. The NATO allies contribute 80% of the Alliance seapower, p. 211.

because the Soviet Navy's missions differ from the NATO naval missions. The Soviet Union only has to deny use of the seas to the Alliance members, while the latter have to gain and maintain that control in order to survive and fulfill their missions. None of the Warsaw Pact members relies heavily on sea lines of communication for trade, commerce, or resupply. That is not true for the NATO nations--they must use these routes for peacetime and wartime communications. Since most of the geographic and sanctuary areas discussed are closer--more vital--to the Western Europeans than they are to the Soviet Union or the United States, it seems that bi-lateral negotiations would most likely be more productive in obtaining results equitable to both sides. It must also be emphasized that since the United States is committed to the defense of all NATO powers, she must pursue any maritime arms negotiations in that area only after careful and constant consultation with the other members of NATO. Anything less than this would be politically unacceptable and militarily foolish.

The other methods of possible worthwhile maritime arms controls, namely numbers restrictions, some ship-types limitations and some weapons types restrictions, all have the same frame of reference as geographic considerations. If these negotiations must come, for reasons good or ill, from a NATO perspective they should be conducted on a bi-lateral basis. It is well understood that by accepting (or not objecting to) bi-lateral negotiations, the North Atlantic Alliance members affected by any outcome (other than no agreement) must put great

faith and trust in the United States not to sell them short in the process. By the same token, once that trust has been placed in the United States, the latter must resist any and all tendencies to agree to accords not in the best interests of the Europeans. Some proposals may look very attractive to the United States, and yet be antithetical to the needs of the Western Europeans involved. As the United States consults in good faith with her allies while negotiating with the Soviets, so the allies must be both realistic and honest with the United States. In these bi-lateral talks the United States and their allies must remember that the results of the negotiations are the most important aspect of the situation, not the process of the discussions themselves.¹⁶ An agreement is not always better than no agreement.¹⁷

¹⁶This idea was expressed very starkly by Dr. Winfred Joshua in a conversation in the Spring of 1974 in Washington, when she commented on the upcoming Moscow Summit between Pres. Nixon and Secretary Brezhnev. She said the best agreement would be no agreement at all, but that the political pressures on Mr. Nixon were too great for him to come home empty-handed. It takes strength and will to say no and he had neither the political or personal support to back him.

¹⁷It appears that sometimes the process of negotiation becomes more important than the goal of the discussions. Process seems to take on a life of its own and the goal becomes obscured. In other words, 'no accord' is too often not recognized as a legitimate and possible result of a bargaining attempt between or among various nations. 'No agreement' is not considered a 'positive' step and is, therefore, not accepted as a worthwhile result in a negotiation. It should be more generally recognized as an acceptable conclusion. This would then take the burden off the participants to 'produce' something 'positive', thus returning process to its proper position and re-emphasizing goal as the most important aspect of the situation. With primacy placed on goal rather than process, the negotiators could agree to disagree if necessary, without being seen by their various publics as 'unproductive', or 'unwilling to negotiate in good faith'.

It must also be said that if the United States intends, regardless of the negotiating process and any possible results, to make a particular move such as cut aircraft carriers in the Mediterranean to one plus a periodic "surge" force, or limit nuclear powered attack submarines to 100, then almost any agreement is better than none. Military cuts or restraints or limits dictated by economic necessity or political decisions at home should not be made before all possibilities have been exhausted in trying to gain some reciprocal action. If, for example the Soviet said only two (or one) NATO carriers could sail the Mediterranean at any one time (thus effectively excluding the French and British carriers), then the United States must refuse any agreement at all. A unilateral United States decision to remove one of her carriers from the area would in no way affect the allies' navies although it would affect the overall defense posture of the Alliance.

If a negotiating situation already extant, namely the mutual force reduction talks, strays into the area of maritime considerations, however unlikely at this point, the one worthwhile method of examining maritime arms control in that forum is the ship-days or operational approach. That could be managed fairly easily within the NATO area on a bloc-to-bloc or multi-lateral basis. It could provide standards for littoral nations and other criteria for visiting navies. It could include joint operations limits as well as ceilings for independent steaming. Although it runs counter to the freedom of the high seas concept, it could be used as a "confidence

building' measure at least for non-strategic weapons systems and platforms. This might be particularly applicable if coupled with a geographic distance from given coastal states. Ocean exercises, for example, could not take place closer than 75 miles from another's coastline (without prior permission), regardless of a three, six, or 12 mile territorial sea. This would permit either side to conduct national or joint naval exercises, but not unnecessarily or uncomfortably close to the territory of another nation.

In summary, it seems that negotiations involving only strategic weapons systems (nuclear missile-carrying and nuclear-powered attack submarines) should be conducted on a bilateral basis between the United States and the Soviet Union. Strategic weapons systems talks involving the assets of the British and the French but not including them as participants, could only work to the overall disadvantage of the Western nations. In the first place, the United States would be discussing restraints of systems over which it has no real control and second, neither of those two would be willing to accept any limits resulting from talks in which they had no part. Third, it must also be recognized that Great Britain, France, and the United States might not always be sufficiently close allies to warrant the assumption that the weapons of one are the potential defenders of all. In short, they may not be allies in perpetuity.¹⁸ This last reason also indicates

¹⁸ Allied interests diverge in other arenas touched upon in this essay--oil, law of the sea, the Middle East Conflict, economics, and MBFR.

why neither Great Britain nor France would enter into negotiations of strategic systems with the United States or the Soviet Union. Had they been willing to rely totally on the United States in the first place, they would not have built their own systems. Therefore, they will not themselves discuss any controls which would limit or reduce their freedom of maneuver, unless it involved colossal reductions in the assets of the two superpowers. This latter is an unlikely occurrence.

Regional or geographic maritime arms negotiations, on the other hand, should include the interested parties, that is, those whose navies use the area or whose country is affected by discussions of that area. A conference on the Barents-Norwegian Seas must include Norway and perhaps Great Britain, as well as the United States and the Soviet Union. Those countries with a vested interest in the Mediterranean have been mentioned before. These discussions must be on a multi-lateral basis, especially if they center around conventional weapons systems and some sort of ship-day or ship-type or numbers formula or a combination of these factors.

Any maritime arms discussions involving only stationed forces (to use the phrase of the Central European force reduction talks) can and probably should be carried on in a bilateral mode. By the same token, any negotiations materially affecting the indigenous forces (whether strategic or conventional) must include representatives from those states. The United States cannot speak for the other NATO allies in matters affecting their national armed forces, nor perhaps can the Soviet Union. The substance of the maritime arms control talks,

then, dictates the numbers of participants.

Can a Maritime Arms Control Formula be Created?

The short answer to this question is: probably yes, but with many caveats. If past experience is any indicator, negotiations should center on: (a) items which were not going to be pursued anyway; (b) those which are ripe for controls, such as obsolescent weapons systems or numbers beyond which none was going anyway; (c) those which are redundant or which will endanger national security least by reduction. As much as possible, the governments should know ahead of time how much they are willing to sacrifice in order to achieve some sort of agreement. In other words, how important are factors as verification and recovery time (as mentioned in Chapter VI)? After these have been weighed and measured, they can be given a "value" in the larger perspective. The probable items of the talks should dictate the forum and the participants. The national government should determine what are its goals in any negotiations. Is it willing to accept less than its original aims in order to obtain some sort of accord, or are the initial goals the only acceptable ones? If some sort of compromise is acceptable in the talks, what are the confines of this compromise? What, in short, is negotiable and what is non-negotiable? Is an agreement of some type the most important goal? If the accord at the end of the process is paramount, then what is the national government willing to accept or sacrifice to achieve the accord? Here, a list of options in ascending order of importance (or weight or value) should be calculated as a

guideline for the negotiators (and the policy makers).¹⁹

The formula for future maritime arms control negotiations must be flexible in its creation and use. The possible combinations of weapons and methods should be several and at least partially interchangeable. This initial adaptability in making the formula will allow the conferees to change and substitute the elements to enhance the negotiating process. This in no way implies either ease of negotiating or lack of strength to hold out for an equitable result. The process will be long, complicated, and sometimes non-productive. And the government must always be willing to accept the possibility of no accord at all because of irreconcilable differences. The flexible formula does, however, provide the negotiators more options with which to work and also provides them with a broader knowledge

¹⁹See: Richard M. Nixon, U.S. Foreign Policy for the 1970's, Building For Peace--A Report to the Congress, U.S. Government Printing Office, Washington, D.C., February 25, 1971, in which he explains the preliminaries before the Strategic Arms Limitation Talks. "We made a detailed analysis of our ability, and the measures needed, to verify compliance with each agreement. We also studied counter-actions if we detected a violation and whether we could take them in time to protect our security. The result was the development of individual 'building blocks' for all offensive and defensive weapons. We can combine these blocks in various clusters of limitations and reductions to produce alternative proposals for the negotiations. This enables us to respond quickly and meaningfully to any Soviet counter-proposals; at home we are not the prisoner of bureaucratic jockeying to come up with an agreed response," pp. 188-189. In commenting on this development of "building blocks," Mr. Nixon said, "It was anticipated that our new approach might forestall the early stalemates which had characterized previous arms control negotiations when opening positions inevitably differed," p. 172 in Richard M. Nixon, U.S. Foreign Policy for the 1970's. The Emerging Structure of Peace--A Report to the Congress, U.S. Government Printing Office, Washington, D.C., February 9, 1972.

and (hopefully) understanding of the situation.²⁰ On the negative side, the multiple option situation may seduce the conferees into feeling that, with all the variations at their fingertips, there must be some combination attractive to the other side(s). They become merchants offering their wares and cutting prices to get a sale.

The maritime arms control formula should combine, within its flexible formula, the methods of pursuing an agreement with the topics of the discussion. In other words, methods like ship-days in an area, or a sliding scale of numbers and types, or sanctuaries, should be combined with the techniques of the negotiations. These include the "building block" approach of varying and changing the elements of the formula in order to broaden the scope of the talks within the limits determined by the national government. By providing latitude in content and method of negotiations, the national government increases the possibility of agreement without decreasing national security below the level it has determined as acceptable.

What Does History Indicate for the Future?

In reviewing the treaties, agreements, accords, and attempts at agreements in the maritime atmosphere, one comes away with a rather gloomy outlook. History has not been kind

²⁰The more variables involved in the possible formula, the more the negotiators must comprehend the broad implications of any set of combinations in order to put together worthwhile elements from a national security perspective as well as from a negotiating viewpoint.

to arms control efforts in this arena, either in the idealistic period right after World War I or in the more realistic era since the Second World War. Nations abjure those plans which they were going to foreswear despite the accord; or those items too costly to maintain; or systems which outlived their real usefulness. Agreements which did in fact require substantial limits or reductions lasted only for short periods before one or another nation began to circumvent the accord either covertly or overtly after renouncing the treaty. Post-World War II accords have fared somewhat better, but they have cut into national security assets less substantially and have been overcome or outmoded by technological progress in most instances.

The most recent revelations about the possible violations of the SALT I Interim Agreement may bode ill for future negotiation attempts based on national technical means of verification. Unless and until new verification procedures can be developed, accords based on those principles will be suspect from their beginning. This distrust will retard or perhaps block any negotiations aimed at substantive results in the maritime area. If agreements can be abrogated or circumvented with such apparent ease and impunity, then they lose any value in the international arena. No state is going to bother with discussing arms control in a situation in which the parties lack a background of good faith and acceptance of international obligations as demonstrated by their compliance with past accords.

Perceptions, then, become very important: perceptions in the case of the NATO nations, of their other allies; of the utility of their own weapons systems and the increasing costs thereof; and of the adversary, in relation to both intentions and capabilities. The upward spiral of costs of personnel, ships, and weapons systems makes it necessary for each government to reexamine its perceptions of its own national security needs. Because the defense costs in the maritime arena are rising so rapidly, these nations may determine that the costs are not worth the results, that the nations would be better off economically and socially with a decrease in defense expenditures and resulting increases elsewhere. The passage of time has not diminished the hopes and assumptions that decreased defense spending will make money available for other sectors of the economy. Secretary of State Hughes stated that in 1922, and India applauded this possible result in her Indian Ocean Zone of Peace proposal.

Idealism, if history is an indicator, will not alone encourage nations to make any substantial and long-lasting maritime arms reductions. The hope of a "better world" or the plea for faith and trust in each other has little impact on sovereign nations which perceive all others as potential or real enemies against which they must guard themselves. No nation will accept the amorphous exhortations of international good will and peaceful co-existence as sufficient reasons to reduce its armaments substantively. On the other hand, no nation seems really interested in pursuing continued accords

in areas or covering procedures inconsequential to their security. Most of the geographic areas or technological aspects which can be restricted, controlled, limited or prohibited have been so negotiated (Antarctica, Outer Space, the Seabed, Partial-Test Ban, Latin American Nuclear Free Zone, and others). In short, the western nations must soon consider some of the fundamental elements of their maritime defense programs such as numbers and types of ships and where these forces are disposed, if they are desirous of pursuing arms control measures as a way of lessening world tensions. As indicated in this essay, if 'making a better world' were the only reason of maritime arms control negotiations, the push for such bargaining would be small indeed. Another influence, however, may become the most important one and that is the rising cost of continued high levels of assets acquisition.

As indicated in the Introduction, cost factors are rapidly overtaking technologies and perceptions of danger as the principal determinants of levels of national defense. Short of open hostilities, the costs are reaching the levels of unacceptable burdens, at least in the North Atlantic Alliance. To be sure, the relaxing of tensions between East and West has contributed to this reassessment of the situation, but that is only a part of the issue. Nations are less and less willing to put such great amounts of money into weapons systems, platforms, and the people to manage them. Increasing costs, then, make arms control discussions appear more appealing to these states. Arms control negotiations are a method

of trying to get the adversary to give up or limit something in return for reciprocal controls in areas where controls were going to exist for monetary reasons anyway. If the NATO allies are going to end up limiting or reducing their maritime assets because of excessive costs, they might as well utilize the forum of arms control discussions to see if they can get, either bi-laterally or multi-laterally, similar restraints from their adversaries. There is, of course, the distinct possibility that no equivalent controls will be gained, but at least some of the cost burdens weighing on the Westerners must also bear upon the Easterners. These may be sufficiently heavy to induce the Warsaw Treaty Organization members (or member) to consider maritime arms control efforts as a worthwhile enterprise. In that case, the potential for gain on both sides exists and may be great.

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'The time has come!, the Walrus said,
 'To talk of many things
 Of shoes--and ships--and sealing wax--
 Of cabbages--and kings--
 And why the sea is boiling hot--
 And whether pigs have wings'.

Alice Through the Looking Glass,
 Chapter 4

Lewis Carroll

APPENDIX I

PROPOSALS AND AGREEMENTS OF THE INTER-WAR PERIOD

Major Navies as of January 1920¹

	G.B.	U.S.	France	Japan	Italy
Battleships	45	36(7)	20	13(2)	14
Battle Cruisers	9(1)	--	--	7	--
Cruisers	19	15	20	10	7
Light Cruisers	79(9)	18(2)	8	17(6)	10
Flotilla Leaders	26(2)	--	--	--	7
Destroyers	355(6)	220(115)	76	68(10)	47
Submarines	103(10)	105(42)	57(8)	25(11)	80

Parentheses indicate additional ships being built at that time.

¹Richard D. Burns and Donald Urquidi, California State College at Los Angeles Foundation, Disarmament in Perspective: An Analysis of Selected Arms Control and Disarmament Agreements Between the World Wars, 1919-1939, Volume III: Limitation of Sea Power, prepared for the U.S. Arms Control and Disarmament Agency, Contract No. ACDA/RS-55 III, July 1968, mimeographed copy, pp. 37-38.

Secretary Hughes proposed for scrapping and limiting the number of large surface combatants as follows at the Washington Naval Conference 1922:²

	G.B.	U.S.	France	Japan	Italy
Battleships	Scrap 4 to be built. Scrap 15 other capital ships already built.	Scrap 7 being built. Scrap 2 built. Scrap 15 old battle- ships.	None. No speci- ships named or indicat- ed.	Scrap 2 to be built. Scrap 3 being built. Scrap 10 older ships from either category.	No speci- fic ships named, or indicated. Total only mentioned.
Battle Cruisers	Some of the 15 above could come from here.	Scrap 6 being built.	Total only men- tioned.	Scrap 10 older ships from either category.	Total only mentioned.
Total to be scrapped	19	30	Not speci- fied	17	Not specified
Total No. of Capital ships left	22	18	10	10	10

²U.S. Congress, Senate, Conference on the Limitation of Armament, Document No. 126, 67th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C. 1922, pp. 47-49. This was part of the text of Secretary Hughes' speech.

Total Tonnages Remaining

	G.B.	U.S.	France	Japan	Italy
Capital Ships ³	500,000	500,000	175,000	300,000	175,000
Cruisers, FLs ⁴ De- stroyers	450,000	450,000	150,000	270,000	150,000
Submarines	90,000	90,000	30,000	54,000	30,000

Final Tonnage Agreements of the Washington Naval Conference of 1922.⁵

	G.B.	U.S.	France	Japan	Italy
Capital Ship Tonnage Limits	525,000	525,000	175,000	315,000	175,000
Numbers of Capital Ship Re- tained	22	18	10	10	10
Number of Capital Ships Scrapped	20 built and 4 build- ing	15 built and 11 build- ing	--	10 built and 6 build- ing	--
Aircraft Carrier Tonnage Limits	135,000	135,000	60,000	81,000	60,000
Other Surface Combatant Ships	No tonnage ceilings, but no ship may be more than 10,000 tons.				
Submarines	No tonnage ceilings or size limits on individual vessels.				

The U.S., G.B., and Japan scrapped, in numbers, more hulls than they retained, while France and Italy did not need to scrap any.

³U.S. Congress, Senate, Conference on the Limitation of Armament, Document No. 126, pp. 802-803.

⁴U.S. Congress, Senate, Conference on the Limitation of Armament, Document No. 126, p. 804.

⁵U.S. Congress, Senate, Conference on the Limitation of Armament, Document No. 126, pp. 803-810; and Stephen Roskill, Naval Policy Between the Wars, Collins, London, 1968, p. 331.

Fleet Tonnage Tables--London Naval Treaty 1930⁶

	U.S.	G.B.	Japan
Capital Ships	31 Dec 1929 532,400 * 31 Dec 1936 462,400	31 Dec 1929 608,650 * 31 Dec 1936 474,750	31 Dec 1929 292,400 * 31 Dec 1936 266,070
Aircraft Carriers	31 Dec 1929 76,286 * 31 Dec 1936 135,000	31 Dec 1929 115,350 * 31 Dec 1936 135,000	31 Dec 1929 68,870 * 31 Dec 1936 81,000
Cruisers Over 6.1" Guns	31 Dec 1929 130,000 * 31 Dec 1936 150,000	31 Dec 1929 186,226 * 31 Dec 1936 146,800	31 Dec 1929 108,400 * 31 Dec 1936 108,400
Cruisers Under 6.1" Guns	31 Dec 1929 70,500 * 31 Dec 1936 189,000	31 Dec 1929 177,685 * 31 Dec 1936 192,200	31 Dec 1929 98,415 * 31 Dec 1936 100,450
Destroyers	31 Dec 1929 290,304 * 31 Dec 1936 150,000	31 Dec 1929 184,371 * 31 Dec 1936 150,000	31 Dec 1929 122,575 * 31 Dec 1936 105,500
Submarines	31 Dec 1929 80,980 * 31 Dec 1936 52,700	31 Dec 1929 60,284 * 31 Dec 1936 52,700	31 Dec 1929 77,842 * 31 Dec 1936 52,700
TOTALS	1,180,470 * 1,139,100	1,332,566 * 1,151,450	768,502 * 714,120

The U.S. agreed to tonnage reductions in capital ships, destroyers, and submarines. She received increases in tonnage for aircraft carriers and two varieties of cruisers.

Great Britain agreed to reductions of tonnage in capital ships, large (or heavy) cruisers, destroyers, and submarines. She

⁶From Tables II and V, Department of State, London Naval Conference--Digest of the London Naval Treaty of 1930 with Fleet Tonnage Tables, Conference Series No. 4, U.S. Government Printing Office, Washington, D.C., 1930, pp. 11-12.

gained tonnage limits in aircraft carriers and smaller (or light) cruisers.

Japan agreed to tonnage reductions in capital ships, destroyers, and submarines, while receiving increases in tonnage for carriers and small (or light) cruisers.

All three states agreed to the same submarine tonnages by 1936.

Limitation of Naval Armament Made in London, 1936⁷

<u>Category of Ship</u>	<u>Limitation</u>
1. Capital ship more than 10,000 tons or with a gun calibre exceeding 8".	Max. 35,000 tons each. Max. gun calibre of 14". None of less than 17,500 tons to be built before 1943. None with a gun calibre of less than 10" to be built before 1943.
2. Capital ships up to 8,000 tons with a gun calibre exceeding 8".	None to be built before January 1943.
3. Aircraft carriers	Max. 23,000 tons each. None with a gun calibre exceeding 6.1". None with more than 10 guns exceeding 5.25" in calibre.
4. Light surface vessels of 100 to 10,000 tons with no guns exceeding 8" in calibre.	
a. Vessels with guns exceeding 6.1".	None to be built before January 1943.
b. Vessels above 3,000 tons with no guns more than 6.1".	None exceeding 8,000 tons to be built before January 1943.
c. Vessels less than 3,000 tons with no guns more than 6.1".	May be built with prior notification to other signatories

⁷U.S. Congress, Senate, Subcommittee on Disarmament, Disarmament and Security, A Collection of Documents 1919-1955, 84th Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C. 1956, pp. 43-47.

<u>Category of Ship</u>	<u>Limitation</u>
5. Submarines	Max. 2,000 tons each. Max. gun calibre 5.1".
6. Minor war vessels of 100 to 2,000 tons with no guns exceeding 6.1" in calibre, no torpedo launchers, no speed greater than 20 knots.	Exchange of lists with their characteristics and vital statistics detailed.
7. Auxiliary Vessels exceeding 100 tons not used as fighting ships with no guns exceeding 6.1" in calibre, not more than 8 guns exceeding 3" in calibre, no armor plate, no speed greater than 28 knots, no adaptability for operating aircraft at sea.	Exchange of lists with their characteristics and vital statistics detailed.
8. Small craft--less than 100 tons.	No limitations.

APPENDIX II

NATIONAL CLAIMS TO MARITIME JURISDICTION BY STATES IN THE NATO AREA OF INTEREST¹

State	Territorial Sea	Continental Shelf	Exclusive Fishing	Other Jurisdiction
Albania	12		12	
Algeria	12		12	
Belgium	3		12	3
Bulgaria	12		12	
Canada	12		12	100
Cuba	3		3	12
Cyprus	12		12	12
Denmark	3		12	12
Egypt	12	200 meters	12	18
Finland	4		4	12
France	12		12	6
German D.R.	3		3	3
Fed. Rep. Germany	3	200 meters	3	3
Greece	6			6
Iceland	4	to limits of exploitability	50	4
Ireland	3		12	3
Israel	6		6	6
Italy	6	200 meters	12	12
Lebanon			6	6
Libya	12			
Malta	6		12	12
Morocco	12		70	20
Netherlands	3		12	12
Norway	4	to limits of exploitability	12	10
Poland	6		12	12
Portugal	6	200 meters	12	100

¹ Department of State, Office of the Geographer, Bureau of Intelligence and Research, Limits in the Seas No. 36--National Claims to Maritime Jurisdiction, Department of State, Washington, D.C. April 1, 1974, Revised.

Rumania	12		12	
Soviet Union	12	200 meters	12	
Spain	6		12	12
Sweden	4		12	4
Syria	12	200 meters	12	18
Tunisia	12		12	
Turkey	12		12	6
United Kingdom	3		6	3
United States	3		12	200
Yugoslavia	10	200 meters	10	10

These are the claimed limits in nautical miles, unless otherwise indicated, of the listed states. Some have complicated treaty arrangements with other states, while others have no specific mileage claims, such as a continental shelf to the limits of exploitability. Other jurisdictions include customs, security, neutrality, sanitary, pollution, baselines, and criminal and civil jurisdiction.

LATIN AMERICAN CLAIMS TO MARITIME JURISDICTION

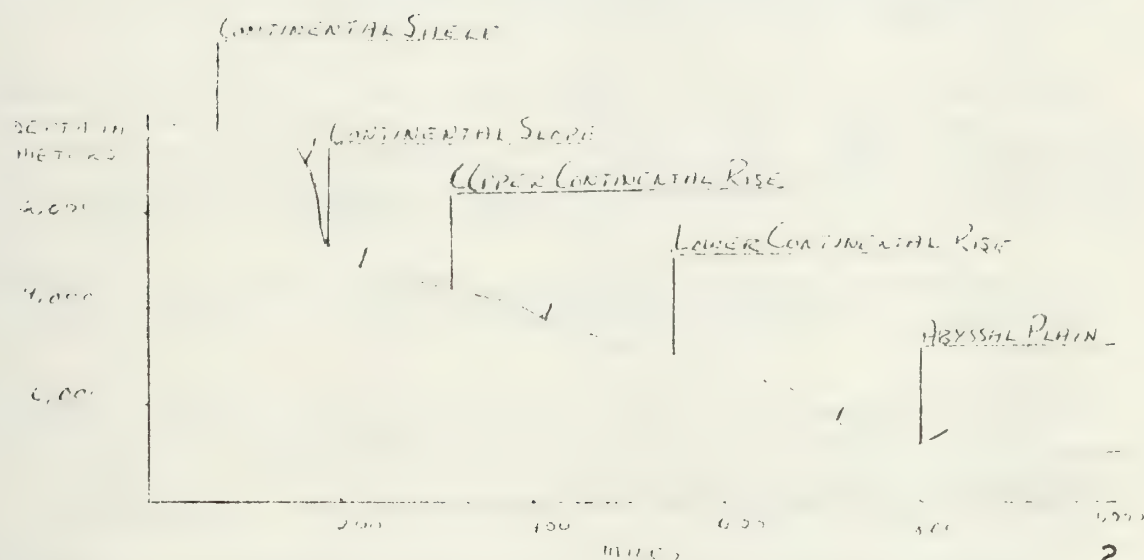
State	Territorial Sea	Continental Shelf	Exclusive Fishing	Other Jurisdiction
Argentina	200 n.m.	to limits of exploitability	200 n.m.	12 n.m.
Brazil	200 n.m.	to limits of exploitability	200 n.m.	6 n.m.
Chile	200 n.m.	200 n.m.	200 n.m.	100 k.m.
Colombia	12 n.m.		12 n.m.	12 n.m.
Costa Rica	12 n.m.	200 n.m.		200 n.m.
Ecuador	200 n.m.	to a depth of 200 meters	200 n.m.	200 n.m.

El Salvador	200 n.m.	200 n.m.	200 n.m.	
Guatemala	12 n.m.	to edge of the continen- tal shelf		12 n.m.
Honduras	12-200 n.m	to limits of exploitabi- lity		
Mexico	12 n.m.	to edge of the continen- tal shelf	12 n.m.	
Nicaragua		to a depth of 200 meters	200 n.m.	
Panama	200 n.m.	200 n.m.	200 n.m.	
Peru	200 n.m.	200 n.m.	200 n.m.	
Uruguay	200 n.m.	to limits of exploit- ability	12 n.m.	200 n.m.
Venezuela	12 n.m.	200 meters beyond limits of exploita- bility	12 n.m.	15 n.m.

APPENDIX III

The Continental Margin

The continental margin is "that portion of the ocean adjacent to the continent and separating it from the deep sea. The continental margin includes the continental shelf, the continental slope, and continental rise."¹



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¹David A. Ross, Introduction to Oceanography, Appleton-Century-Crofts, New York, 1970, p. 359.

²Ross, Introduction to Oceanography, p. 274.

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